## INSTALLER/CONSUMER SAFETY INFORMATION

**PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING APPLIANCE**

**WARNING!**
**IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.**

**FOR YOUR SAFETY**

**Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

**WHAT TO DO IF YOU SMELL GAS:**

- Do not try to light any appliance.
- Do not touch any electric switch;
- Do not use any phone in your building.
- Immediately call your gas supplier from your neighbor's phone. Follow the gas suppliers instructions.
- If you cannot reach your gas supplier call the fire department.

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

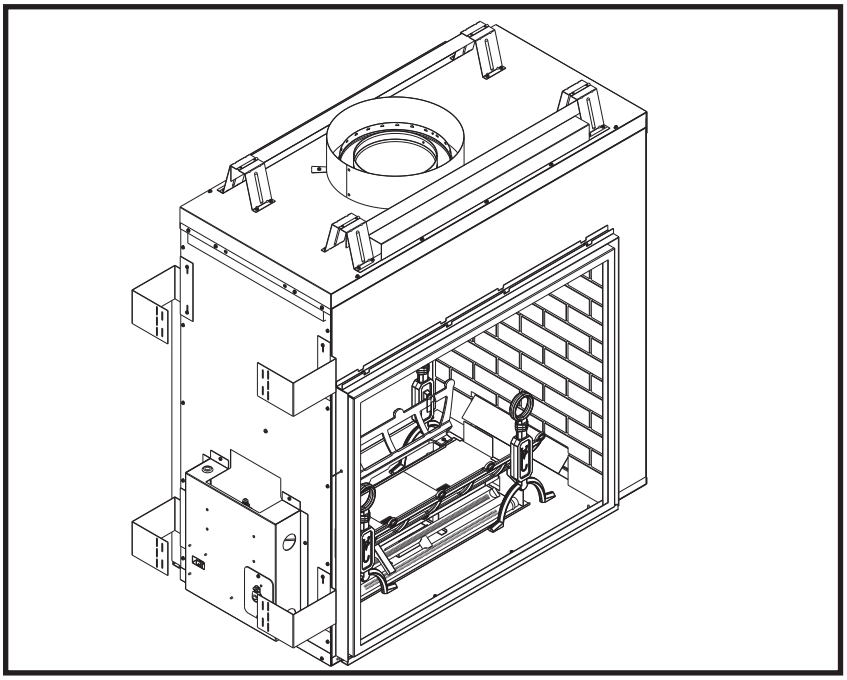
DESIGN CERTIFIED

CERTIFIED

VERMONT CASTINGS

# Chateau™ Direct Vent Gas Fireplace

## Model: DVT38S2IN



## Installation Instructions and Homeowner's Manual

**INSTALLER: Leave this manual with the appliance.**
**CONSUMER: Retain this manual for future reference.**

20011957 11/07 Rev. 2

# Table of Contents

**Please read the installation & operating instructions before using this appliance.**
**Thank you and congratulations on your purchase of a CFM Corporation fireplace.**
**IMPORTANT: Read all instructions and warnings carefully before starting installation.**
**Failure to follow these instructions may result in a possible fire hazard and will void the warranty.**

**Installation & Operating Instructions**

General Information, Cautions, Warnings....3
Requirements for the Commonwealth of Massachusetts....4
Fireplace Dimensions....5
Locating Your Fireplace....5
Clearance to Combustibles....6
Mantels....6
Hearth....7
Framing & Finishing....7
Final Finishing....7
Gas Specifications....8
Gas Inlet and Manifold Pressures....8
High Elevations....8
Gas Line Installation....8
Electrical Junction Box....8
Control System....9
Control System Installation....9
Special Features for Cold Climates....10
Hand-Held Remote Control Transmitter Operating Instructions....11

**General Venting Information**

General Venting....15
General Venting Information - Termination Location....16
General Information Assembling Vent Pipes....17
SK8 Venting Pipes....17
Horizontal Termination....18
Vertical Termination....18
Sidewall Applications & Installation....18
Sidewall Installation with Stationary Glass Facing Outside....21
Installing the 38S2VDK Door....22
Vertical Through-the-Roof Applications & Installation....23
Use of Restrictor Plates for Vertical Venting Application....23
Flue Restrictor Plate Installation....23
Chimney Components....27

**Operating Instructions**

Glass Information....28
Glass Frame Assembly Removal....28
Glass Cleaning....28
Ceramic Refractory Installation....28
Log, Lava Rock and Ember Placement....29
Flame Characteristics....33
Trim Installation....34
Lighting and Operating Instructions (American Flame Automatic Control System)....35
Troubleshooting....36
American Flame Gas Control System Error Codes....38
Fuel Conversion....39

**Maintenance**

Cleaning the Control System....42

**Replacement Parts**....43
**Optional Accessories**....46
**Warranty**....47
**Energuide**....48

# Installation & Operating Instructions

This gas fireplace should be installed by a qualified installer, preferably NFI or WETT (Canada) certified, in accordance with local building codes and with current CSA-B149.1 Installation codes for Gas Burning Appliances and Equipment. For USA Installations follow local codes and/or the current National Fuel Gas Code. ANSI Z223.1/NFPA 54.

FOR SAFE INSTALLATION AND OPERATION PLEASE NOTE THE FOLLOWING:

1. This fireplace gives off high temperatures and should be located out of high traffic areas and away from furniture and draperies.
2. Children and adults should be alerted to the hazards of the high surface temperatures of this fireplace and should stay away to avoid burns or ignition of clothing.
3. **CAUTION: Due to high glass surface temperature children should be carefully supervised when in the same room as fireplace.**

**⚠ WARNING**

**HOT GLASS** WILL CAUSE BURNS.

**DO NOT TOUCH** GLASS UNTIL COOLED.

**NEVER** ALLOW CHILDREN TO TOUCH GLASS.

4. Under no circumstances should this fireplace be modified. Parts removed for servicing should be replaced prior to operating this fireplace again.
5. A professional service person should be contacted to inspect the fireplace annually. More frequent cleaning may be required due to excess lint and dust from carpeting, bedding material, etc.
6. Control compartments, burners and air passages in this fireplace should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are turned off before you attempt to clean this fireplace.
7. The venting system (chimney) of this fireplace should be checked at least once a year and if needed your venting system should be cleaned.
8. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. This fireplace should not be used as a drying rack for clothing, nor should Christmas stockings or decorations be hung on or around the fireplace.
9. Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this fireplace.
10. The flow of combustion and ventilation air must not be obstructed in any way.
11. When the fireplace is installed directly on carpeting, vinyl tile or any combustible material other than wood, this fireplace must be installed on a metal or wood panel extending the full width and depth of the fireplace.
12. This fireplace requires adequate ventilation and combustion air to operate properly.
13. This fireplace must not be connected to a chimney flue serving a separate solid fuel burning fireplace.
14. When the fireplace is not in use it is recommended that the gas control valve be left in the **"OFF"** position.

**NOTE:** We recommend that you install the Battery Back-up Kit, DVTBBK, which must be installed at the time of fireplace installation. The use of this kit will allow your fireplace to continue to operate in the event electric power is lost such as during a severe snow, ice or thunder storm. Refer to Item 16 on Page 8.

**DVT38S2**
**Certified To**
**ANSI Z21.50b-2005 / CSA 2.22b-2005**
**Vented Gas Fireplace**

**WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.**

## IMPORTANT:

**PLEASE REVIEW THE FOLLOWING CAREFULLY**

Remove any plastic from parts before turning the fireplace ON.

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is not unusual for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

**Please ensure that your room is well ventilated-open all windows.**

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it.

**This appliance may be installed in an aftermarket permanently located, manufactured home or mobile home, where not prohibited by local codes.**
**This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.**
**The DVT38S2 has been approved for mobile home installations.**

**Proposition 65 Warning:** Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. California Health & Safety Code Sec. 25249.6

# Installation & Operating Instructions

## Requirements for the Commonwealth of Massachusetts

All gas fitting and installation of this heater shall only be done by a licensed gas fitter or licensed plumber.

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

### Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontally vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

### Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and ANSI/UL 2034 listed and IAS certified.

### Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, **"GAS VENT DIRECTLY BELOW, KEEP CLEAR OF ALL OBSTRUCTIONS".**

### Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

### Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

## MANUFACTURER REQUIREMENTS

### Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

### Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

## Fireplace Dimensions

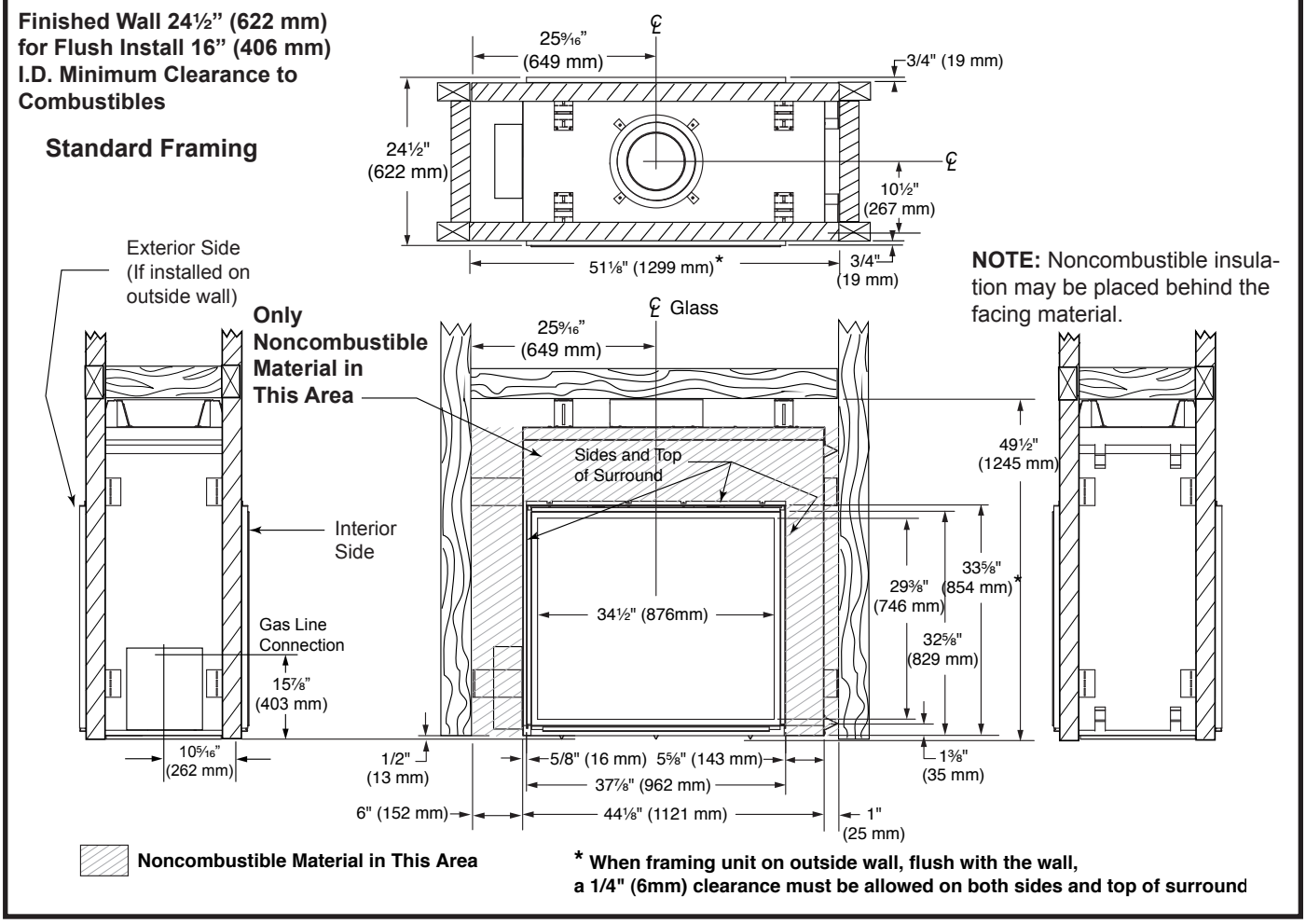

Finished Wall 24½" (622 mm) for Flush Install 16" (406 mm) I.D. Minimum Clearance to Combustibles
Standard Framing
25⁹⁄₁₆" (649 mm)
3/4" (19 mm)
24½" (622 mm)
10½" (267 mm)
51⅛" (1299 mm)*
3/4" (19 mm)
NOTE: Noncombustible insulation may be placed behind the facing material.
Exterior Side (If installed on outside wall)
Only Noncombustible Material in This Area
℄ Glass
25⁹⁄₁₆" (649 mm)
Sides and Top of Surround
49½" (1245 mm)
Interior Side
Gas Line Connection
15⅞" (403 mm)
34½" (876mm)
29⅜" (746 mm)
33⅝" (854 mm)*
32⅝" (829 mm)
10⁵⁄₁₆" (262 mm)
1/2" (13 mm)
5/8" (16 mm)
5⅝" (143 mm)
1⅜" (35 mm)
37⅞" (962 mm)
6" (152 mm)
44⅛" (1121 mm)
1" (25 mm)
Noncombustible Material in This Area
* When framing unit on outside wall, flush with the wall, a 1/4" (6mm) clearance must be allowed on both sides and top of surround

**Fig. 1** Fireplace specifications and framing dimensions for DVT38S2.

## Locating Your Fireplace

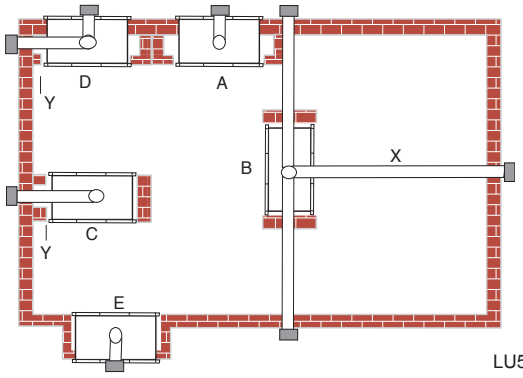



**Fig. 2** Locate gas fireplace.

A) Flat on wall B) **Island C) *Room divider
D) *Flat on wall corner E) Chase installation
Y) 6" minimum

**Note (Fig. 2):**
** Island (B) and Room Divider (C) installation is possible as long as the horizontal portion of the vent system (X) does not exceed 20' (610cm). See details in Venting Section.
* When you install your fireplace in (C) Room divider or (D) Flat on wall corner positions (Y), a minimum of 6" (152mm) clearance must be maintained from the perpendicular wall and the front side edge of the fireplace.

## Clearance to Combustibles

Top of Unit to Ceiling ..... 36” (914 mm)
Front of Unit to Combustibles (both sides) 36” (914 mm)
Appliance
- Top Standoffs ..... 0” (0 mm)
- Bottom* ..... 0” (0 mm)
- Side Standoffs ..... 0” (0 mm)
- Back Standoffs ..... 0” (0 mm)

Venting
- Horizontal Termination through-a-side wall:
  - Vertical Sections:
    - Sides ..... 2½” (64 mm)
  - Horizontal Sections:
    - Top ..... 3½” (89 mm)
    - Bottom ..... 1½” (38 mm)
    - Sides ..... 2½” (64 mm)
- Vertical Vent Application:
  - Sides ..... 1½” (38 mm)

* To prevent the potential for odors, do not use epoxy-filled particle board directly under this fireplace.

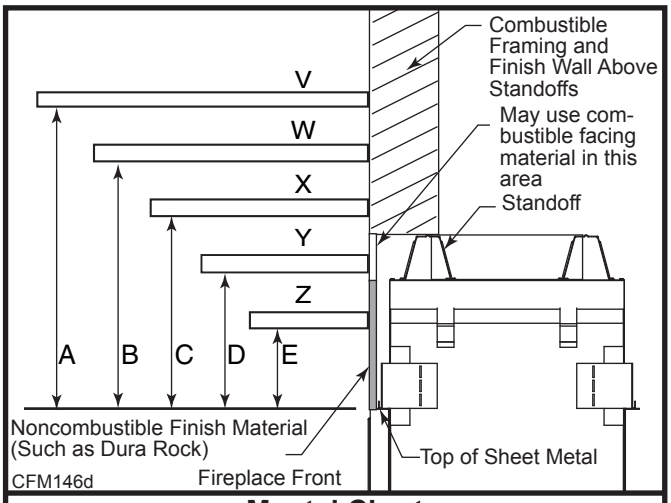
## Mantels

The height that a combustible mantel is fitted above the fireplace is dependent on the depth of the mantel. This also applies to the distance between the mantel leg (if fitted) and the fireplace.

For the correct mounting height and widths refer to Figs. 3a and 3b, the following Mantel Charts.

Noncombustible mantels and legs may be installed at any height and width around the appliance.

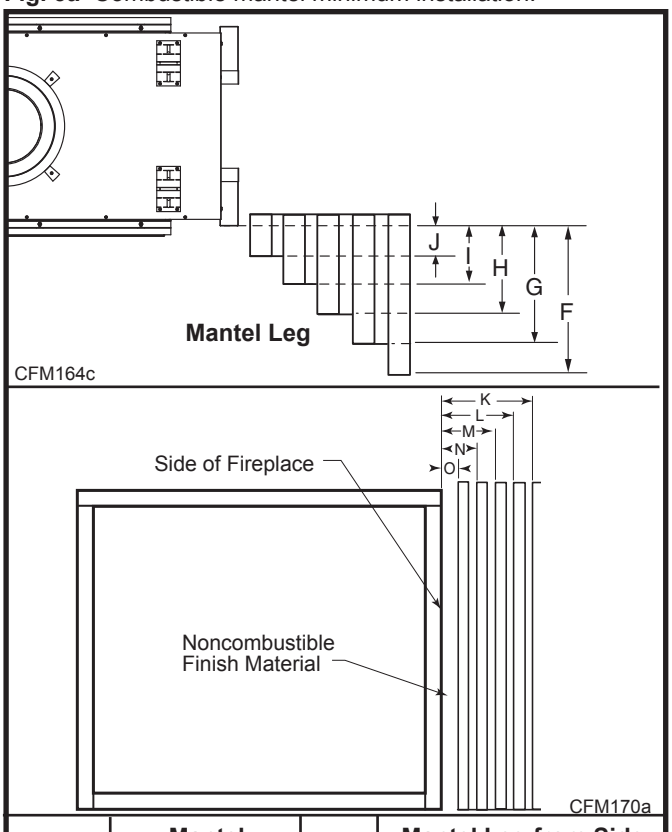
When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant to prevent discoloration.




**Mantel Chart**

| Ref. | Mantel Shelf or Breast Plate Depth | Ref. | Mantel from Top of Comb. Chamber |
|---|---|---|---|
| V | 10” (254 mm) | A | 10” (254 mm) |
| W | 9” (229 mm) | B | 9” (229 mm) |
| X | 8” (203 mm) | C | 8” (203 mm) |
| Y | 7” (178 mm) | D | 7” (178 mm) |
| Z | 6” (152 mm) | E | 6” (152 mm) |

**Fig. 3a** Combustible mantel minimum installation.




| Ref. | Mantel Leg Depth | Ref. | Mantel Leg from Side of Comb. Opening |
|---|---|---|---|
| F | 12” (305 mm) | K | 12” (305 mm) |
| G | 9” (229 mm) | L | 9” (229 mm) |
| H | 6” (152 mm) | M | 6” (152 mm) |
| I | 4” (102 mm) | N | 4” (102 mm) |
| J | 3” (76 mm) | O | 3” (76 mm) |

**Fig. 3b** Combustible mantel leg minimum installation.

## Hearth

A hearth is not mandatory but is recommended for aesthetic purposes. We recommend a noncombustible hearth which projects out 12” (305 mm) or more from the front of the fireplace. The hearth cannot exceed 1½” (38 mm) in height from bottom of fireplace for ease of door accessibility. (Fig. 4)

**Cold climate installation recommendation:**

**When installing this unit against a non-insulated exterior wall or chase, it is mandatory the outer walls be insulated to conform to applicable insulation codes.**

## Framing and Finishing

1. Choose the unit location.
2. The unit is shipped with four (4) nailing flanges mounted near the front corners on the side with the valve box assembly . (Fig. 4)
3. Frame the fireplace with a header across the top of the standoff. (Fig. 5) It is very important to allow for the finished wall face along with marble, tiles or any other noncombustible face finish material desired when setting the depth of the framing.
4. Attach the fireplace nailing flanges to the frame as shown in Figure 4.

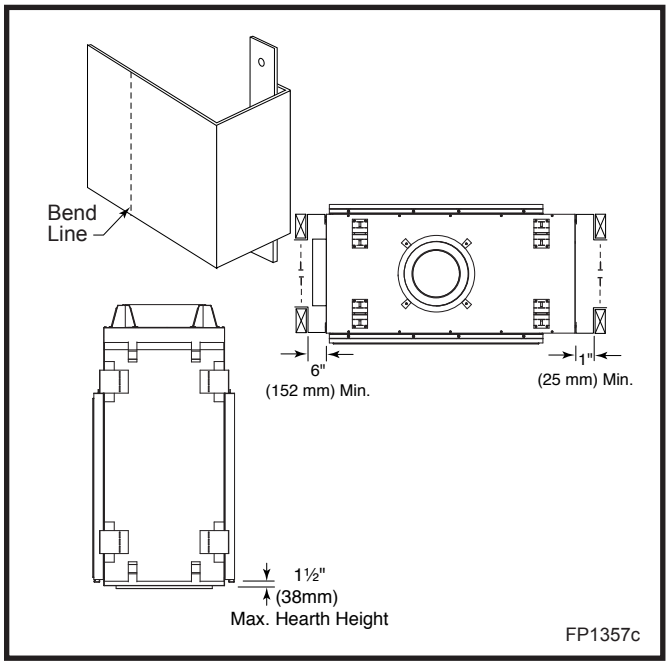



**Fig. 4** Nailing flanges.

5. The gas components are located in the valve box assembly attached to the side of the unit.
6. The U-channel located on the top of the unit as well as the nailing flanges on the sides that were mentioned in Step 1, are designed to accommodate noncombustible board (recommended Dura-Rock). They are positioned 1” (25mm) back from the face of the unit. **NOTE:** The U-channel depth can be adjusted by loosening the hex nut inside the channel.

   If marble, tile or any other noncombustible decorative face finish material is desired, a 3” (76mm) wide noncombustible board (recommended Dura-Rock) is to be nailed to the nailing flanges on both sides of the unit. Also, 12” (305mm) of noncombustible board is to be nailed to the front face of the U-channel and the top framing member above the standoff.

   Combustible material can then be brought to the outside edges of the noncombustible board installed earlier. Any noncombustible decorative face finish could be brought to the sides and top of the unit and can cover the framing and sheet rock. If a decorative facing is not desired, then the noncombustible boards must be double thickness and brought flush with the face of the unit.

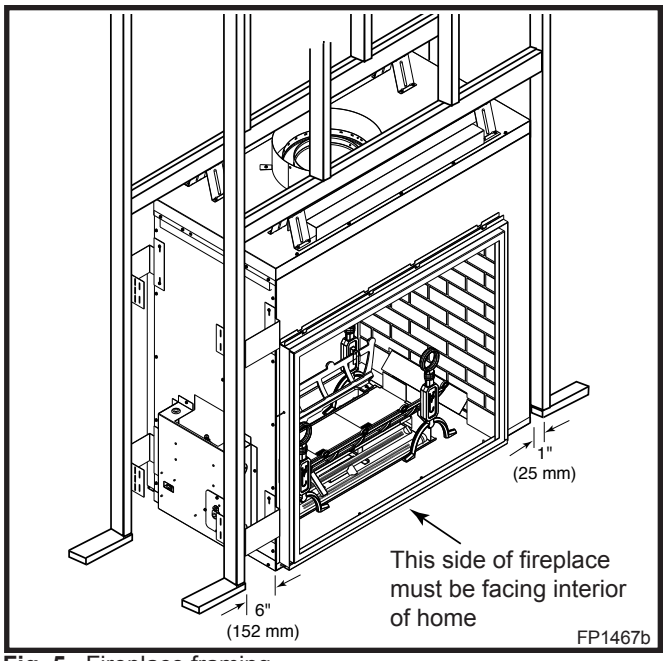



**Fig. 5** Fireplace framing.

## Final Finishing

Noncombustible materials such as brick or tile may be brought to the edges of the face of the appliance.

## Gas Specifications

| Model | Fuel | Gas Control | Max. Input BTU/h | Min. Input BTU/h |
|---|---|---|---|---|
| DVT38S2IN | Natural Gas | AF-4034 w/ | 56,000 | 38,000 |
| DVT38S2IP | Propane | 7.5 DC Hi/Lo | 56,000 | 45,500 |

## Gas Inlet and Manifold Pressures

| | Natural | LP (Propane) |
|---|---|---|
| Minimum Inlet Pressure | 5.5” w.c. | 11.0” w.c. |
| Maximum Inlet Pressure | 14.0” w.c. | 14.0” w.c. |
| Manifold Pressure | 3.5” w.c. | 10.0” w.c. |

## High Elevations

**Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370m) above sea level.**

**For elevations above 4,500 feet (1,370m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.**

**In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370m).**

**WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.**

## Gas Line Installation

**When purging gas line the front glass must be removed.**

**A gas shut off valve must be installed on the gas pipe line going into the appliance within easy access.**

The gas pipeline can be brought in through the top of the valve box assembly.

The gas line connection can be made with properly tinned 1/2” copper tubing or 1/2” gas tight. Some municipalities have additional local codes, it is always best to consult your local authority and the **CSA-B149.1** installation codes.

For USA installations consult the current National Fuel Gas Code, **ANSI Z223.1/NFPA 54.**

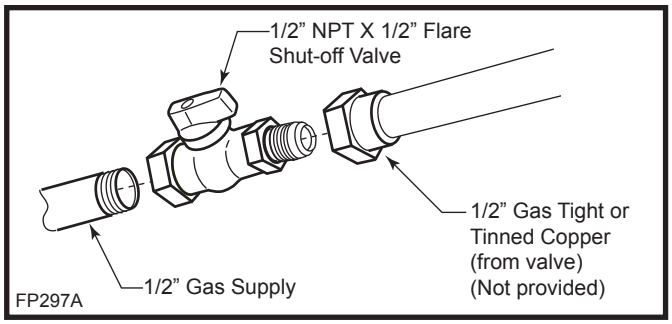



**Fig. 6** Typical gas supply installation.

**Always check for gas leaks with a mild soap and water solution applied with a brush no larger than 1” (25mm). Never apply soap and water solution with a spray bottle. Do not use an open flame for leak testing.**

**The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this or any other gas appliance control from the gas line when pressure testing.**

The gas control is equipped with an inlet and manifold pressure test point, therefore it is not necessary to provide an 1/8” test point up stream of the control.

When using copper, use only approved fittings. **Always provide a union** when using black iron pipe so the gas line can be easily disconnected for burner servicing. A union may not be behind a wall. (Fig. 6) See the gas specifications for pressure details and ratings.

## Electrical Junction Box

**The fireplace, when installed, must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code or the national electrical code ANSI/NFPA No. 70 in the USA.**

**It is strongly suggested that the wiring of the Electrical Junction Box be carried out by a licensed electrician. The box should be near the valve box assembly to plug the cord into.**

**Ensure the power to the supply line has been disconnected before commencing this procedure.**

## Control System

The gas control system is located on the right hand side of the firebox behind an access panel and the decorative brick panel. The fireplace is operated using only the hand held remote control unit. The system wiring diagram is shown in Figure 11. **NOTE: If you choose to install the either the optional battery back-up module, (Model DVTBBK), or the optional wireless wall mountable remote control, (Part #20012267), refer to Item #11 in the next section.**

## Control System Installation

1. Locate the fireplace in the desired location.
2. Remove the glass. Refer to Glass Frame Assembly Removal section.
3. If installed, remove the lava rock, volcanic rock, andirons, embers and logs, making note of each log's location.
4. If installed, remove the refractory brick panel right side and rear pieces.
5. Using a back-up wrench, disconnect the gas supply fitting near the right rear corner of the firebox. (Fig. 7)

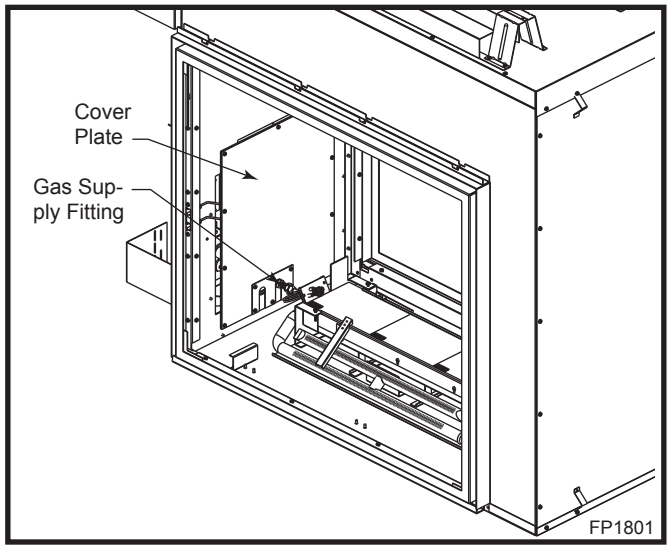



**Fig. 7** Disconnect gas supply fitting and remove 13 screws securing the cover plate.

6. Remove pilot assembly from burner assembly by removing two (2) screws.
7. Carefully slide the burner assembly to the left out of the way, taking care not to bend or break the pilot tubes or wiring.
8. Remove 13 screws around the perimeter holding large access panel on the right hand side of the firebox.
9. Carefully pull back the panel just enough to gain access to control box.
10. Connect the gas supply to the valve. (Fig. 8) Be sure to use a back-up wrench when tightening supply fitting.

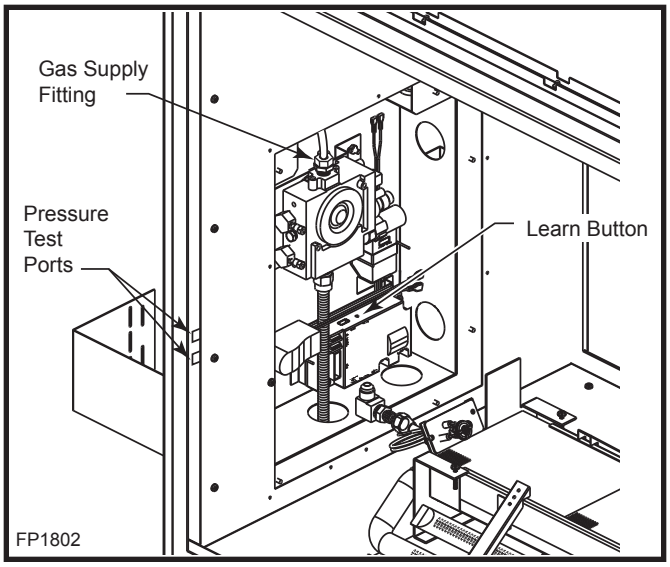



**Fig. 8** Connect gas supply to valve.

11. If you chose to install the optional back-up battery pack (No. DVTBBK), you must install a wall box within 15 feet (4.6 m) of the fireplace. Assemble the connectors on one end of the supplied extension wire harness to the mating connectors on the wire harness within the control box. Make sure to connect black coded wire to black and red coded wire to red.
12. The other end of the extension wire harness should be connected to the wiring of the back-up battery holder located within a wall box.
13. Insert the supplied four (4) "AA" batteries into the battery older. Be sure to note correct polarity for each battery.
14. Mount electrical wall box containing back-up batteries at a convenient location with 15 feet (4.6 m) of the fireplace. Cover wall box using a blank wall plate.
15. Connect a 120V AC electrical supply to the junction box duplex outlet. Use a Romex-type strain relief connector when running wires out through the box knockout. Replace the duplex outlet and cover plate.
16. Plug the AC adaptor plug into the duplex outlet.
17. This control must now be programmed to the remote control transmitter(s). To program the remote control(s), make sure the 120V AC is connected and powered to the fireplace.
18. Remove the battery door on the back of the hand held remote control and install two (2) supplied "AAA" batteries. Be sure to note correct polarity. Replace battery door.
19. If you choose to install the optional wireless wall mounted remote control (Part No. 20012267), install two (2) button batteries provided with the remote control by removing four (4) screws holding the back cover in place. Carefully remove the circuit board.

Install batteries with dimpled side showing. (Fig. 9) Carefully replace circuit board and back cover. Tighten screws.

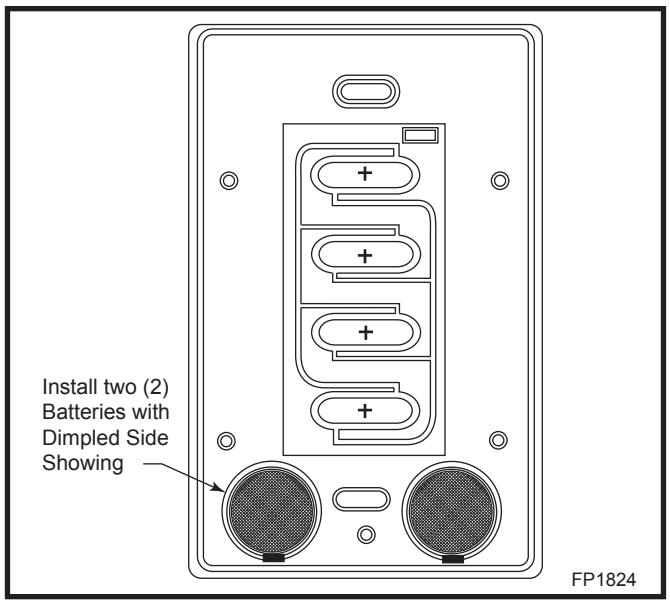



**Fig. 9** Inside view of wireless wall switch.

20. Locate the learn button on the main module. (Fig. 8) Press and release the learn button using a pencil point. There will be a beep sound from the module. Then press any key on the hand-held remote control transmitter. Once the module's internal receiver accepts the transmitter code, there will be a series of confirming beeps. If you are using the optional wall mountable remote control transmitter, press the learn button on the main module a 2nd time. There will be a beep sound from the module. Then press the ON button on the wall mountable transmitter. Once the module's internal receiver accepts the transmitter code, there will be a series of confirming beeps.
21. The fireplace remote system is now ready for use and will respond to either wireless transmitter.
22. Reassemble access panel, burner assembly, gas supply connector, brick panels, logs, embers, andirons and lava rock in reverse order of removal. (Refer to Log, Lava Rock and Ember Placement section.
23. Turn on gas supply and check that all connections are tight and leak free.

**NOTE:** If you need to test the inlet pressure and/or manifold pressure, there are two (2) test ports available along the right side front edge between the firebox side and outer casing. The upper test port is inlet pressure. The lower test port is manifold pressure. (Refer to Figure 8)

**CAUTION: Turn off the gas supply before removing test port plug.**

24. Using a 7/16" nut driver, remove the threaded plug from the test port.
25. Thread the supplied extension adaptor into the open test port.
26. Attach a 1/4" diameter pressure gauge flexible hose fully onto the barb of the adaptor.
27. Turn on gas supply and operate valve with remote control as needed to indicate gas pressure.

**CAUTION: Turn off the fireplace and gas supply before removing test port adaptor and replacing plug.**

28. After test, remove extension adaptor and replace plug securely.
29. Turn on gas supply and check that plugs are tight and leak free.

## Special Feature for Cold Climates

This gas control system has the option of a continuous pilot feature. This allows the user to change from a spark to pilot system to a standing pilot system for direct vent appliances during cold climate conditions to keep the firebox warm.

When the continuous pilot mode is activated and the fireplace is turned ON, the pilot will spark and light. When the fireplace is turned OFF, the pilot will stay ON when the main burner shuts OFF.

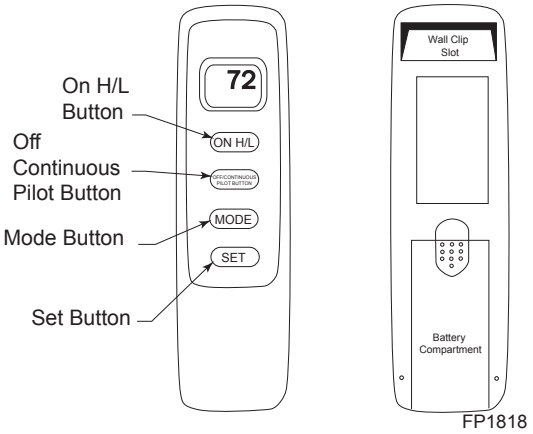
The continuous pilot mode can be activated or de-activated by the hand held remote control transmitter.

# Hand-Held Remote Control Transmitter Operating Instructions

## Introduction

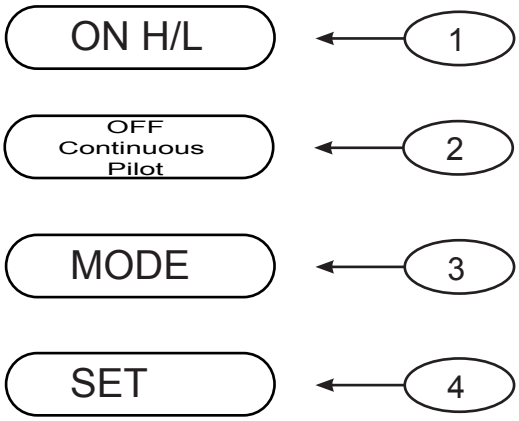
This transmitter operating range is approximately 20 feet (6 m). The transmitter operates on one of 1,048,576 security codes that are programmed into the transmitter at the factory; this transmitter operates on radio frequencies with non-directional signals. The receiver for this transmitter is built into the AF-4000 MOD module.

**Transmitter**




The transmitter operates on (2) 1.5V AAA batteries. It is recommended that ALKALINE batteries always be used for longer battery life and maximum operational performance.

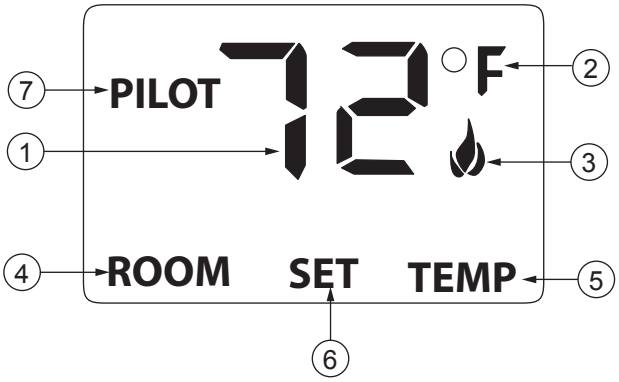
Before using the transmitter, install the (2) AAA transmitter batteries into the battery compartment. (Use caution that batteries are installed in the proper direction.)



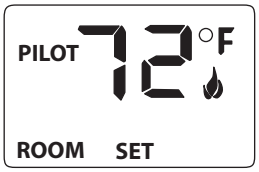

### Key Settings

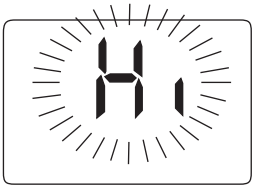
1. ON H/L — Turns unit to ON and operates the flame control HI or LO.
2. OFF CONTINUOUS PILOT — Shuts the unit OFF and activates the continuous pilot on feature.
3. MODE — Changes unit from manual mode to thermostatic mode.
4. SET — Sets temperature in thermo mode.

### LCD - Liquid Crystal Display

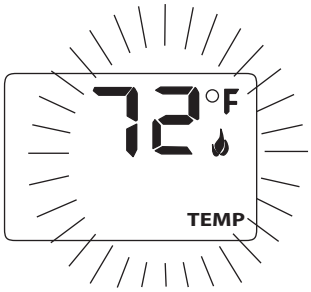



1. DISPLAY — Indicates CURRENT room temperature.
2. ° F or ° C — Indicates degrees Fahrenheit or Celsius
3. FLAME — Indicates burner/valve in operation
4. ROOM — Indicates remote is in THERMOSTATIC mode
5. TEMP — Appears during manual operation
6. SET — Appears while setting the desired temperature in the thermostatic mode
7. PILOT — Appears in the Continuous Pilot mode

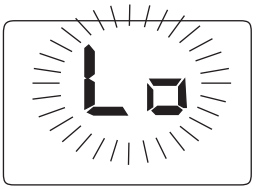


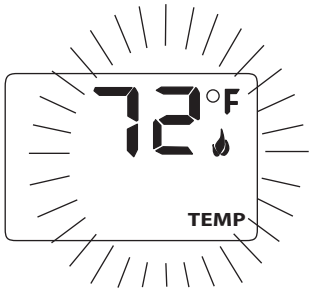

Screen while depressing ON key



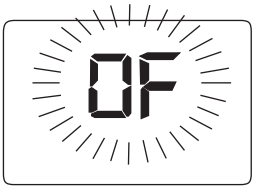

Screen after 3 second default



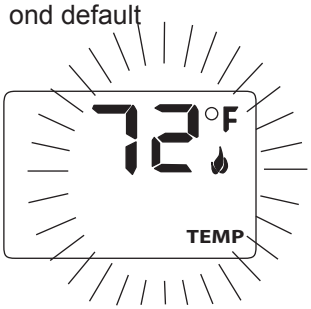

Screen while depressing OFF key



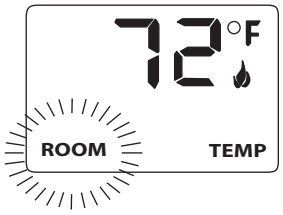

Screen after 3 second default



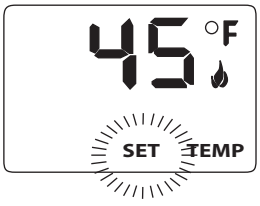

Screen whild depressing OFF key




Screen after 3 second default




Screen after depressing MODE key




Screen while depressing SET key

**Setting ° F / ° C Scale**

The factory setting for temperature is ° F. To change this setting to ° C;

Press the ON H/L key and the OFF CONTINUOUS PILOT key on the transmitter at the same time. This will change from ° F to ° C. Follow this same procedure to change from ° C to ° F.

## Manual Function

To operate the system in the manual “MODE” do the following:

**ON - HI Flame Operation**

Press and release the ON H/L key. The appliance flame will come ON and display will show “HI”.

**ON - LO Flame Operation**

Press the ON H/L key. The appliance flame will modulate down to low flame and display will show “LO”.

**Changing Flame Height**

Press and hold the ON H/L key to raise or lower the flame height.

**OFF Operation**

Press the OFF Continuous Pilot key and the appliance flame will shut off. During this time the LCD screen will show “OF”. After 3 seconds, the LCD screen will default to display room temperature and the word “TEMP” will also show on the screen. (Flame icon will NOT appear on the LCD screen in OFF mode)

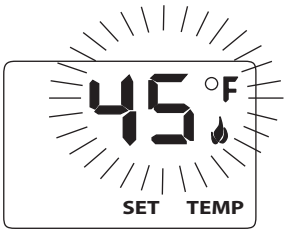
## Thermostat Function

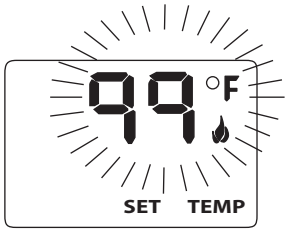
**Setting Desired Room Temperature**

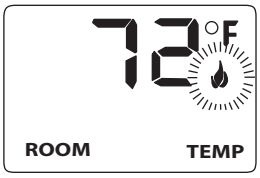
This remote control system can be thermostatically controlled when the transmitter is in the THERMOSTATIC mode. To set the MODE and DESIRED room temperature;

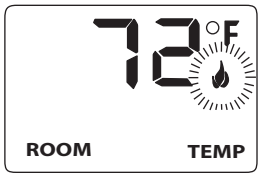
Press the MODE key until the LCD screen shows the word “ROOM”. The remote is now in the thermostatic mode.

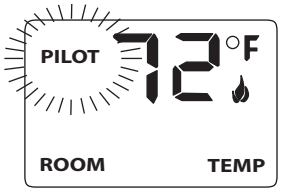
**NOTE: When the word “ROOM” is displayed on the screen, the transmitter is in the thermostatic mode.**



**To Change the Set Temperature**

Press and hold the SET key until the desired set temperature is reached. (By pressing and holding the set key, the LCD screen set numbers will increase from 45° to 99°, then restart at 45°)

Release the SET key. The LCD screen will display the set temperature for 3 seconds, then will flash the set temperature for 3 seconds, then the LCD screen will default to display the room temperature.

**To Disengage Thermostatic Mode**

Press and release the MODE key or press the OFF CONTINUOUS PILOT key to disengage the thermostatic mode. The word “ROOM” on the LCD screen will not show when the thermostatic mode is not in operation.

**NOTE:** The highest SET temperature is 99° Fahrenheit (32° Celsius) and the lowest temperature is 45° Fahrenheit (6° Celsius).

**CONTINUOUS PILOT FEATURE**

This feature allows you to change from a spark to pilot system to a standing pilot system for appliances during Cold Climate to keep the firebox warm.

To operate the CONTINUOUS PILOT FEATURE do the following:

**On or Off Operation**

Press and hold the OFF CONTINUOUS PILOT key for approximately 5 seconds, until the word “PILOT” appears on the LCD screen.

**NOTE:** The word “PILOT” will appear on the LCD screen in ON mode.

**CP (CHILDPROOF) FEATURE**

This SKYTECH remote control includes a CHILDPROOF “LOCK-OUT” feature that allows the user to “LOCK-OUT” operation of the appliance from the transmitter.

**SETTING “LOCK-OUT” - (CP)**

- To activate the “LOCK-OUT” feature, press and hold the ON H/L key and the MODE key at the same time for 5 seconds. The letters “CP” will appear in the TEMP frame on the LCD screen.
- To disengage the “LOCK-OUT”, press and hold the ON H/L key and the MODE key at the same time for 5 seconds and the letters “CP” will disappear from the LCD screen and the transmitter will return to its normal operating condition.
- To verify the transmitter is in the CP lock-out mode, press any key and the LCD screen will show “CP”.

**NOTE:** If the appliance is *already* operating in the ON or THERMOSTATIC modes, engaging the “LOCK-OUT” *will not* cancel the operating mode. Engaging the “LOCK-OUT” prevents only the *manual operation of the transmitter*. If in the auto modes, the THERMOSTATIC operation will continue to operate normally. To totally “LOCK-OUT” the operation of the transmitter’s operating signals; the transmitter’s mode must be set to OFF.

## Operational Notes:

The Thermostatic feature on the transmitter operates the appliance whenever the ROOM TEMPERATURE varies a certain number of degrees from the SET TEMPERATURE. This variation is called the “SWING” or TEMPERATURE DIFFERENTIAL. The normal operating cycle of an appliance may be 2-4 times per hour depending on how well the room or home is insulated from the cold or drafts. The factory setting for the “swing number” is 2. This represents a temperature variation of +/- 2° F (1° C) between SET temperature and ROOM temperature, which determines when the fireplace will be activated. This function is pre-set at the factory.

The transmitter has ON and OFF manual functions that are activated by pressing either button on the face of the transmitter. When a button on the transmitter is pressed the word “ON” or “OF” will appear on the LCD screen to show while the signal is being sent. Upon initial use, there may be a delay of three seconds before the remote receiver will respond to the transmitter. This is part of the system’s design.

**NOTE:** The fireplace receiver will only respond to the transmitter when the 2-position slide button on the module is in the REMOTE position. If the system does not respond to the battery transmitter on initial use, refer to MATCHING SECURITY CODES, and recheck battery positions in the remote receiver.

**Thermostatic Updating Feature**

This remote control has a THERMOSTATIC UPDATING feature built into its software. The THERMOSTATIC UPDATING feature operates in the following manner, while in the THERMOSTATIC mode.

The transmitter reads the ROOM temperature every 2 minutes checking the ROOM temperature against the SET temperature and then sends a signal to the receiver.

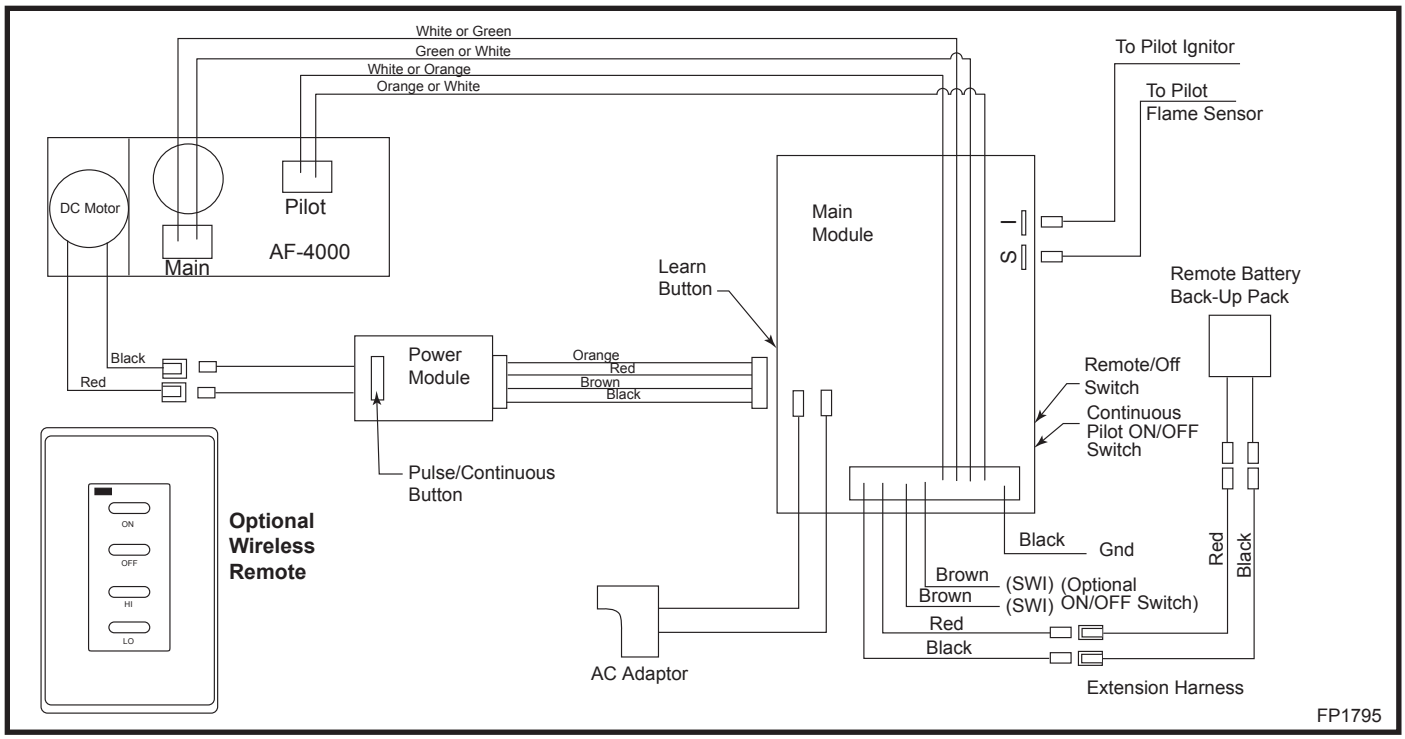



**Fig. 10** DVT38S2 wiring diagram.

# General Venting

Your fireplace is approved to be vented either through the side wall, or vertical through the roof.

- **Only CFM Corporation venting components specifically approved and labelled for this fireplace may be used.**
- Venting terminals shall not be recessed into a wall or siding.
- Horizontal venting must be installed on a level plane without an inclining or declining slope.

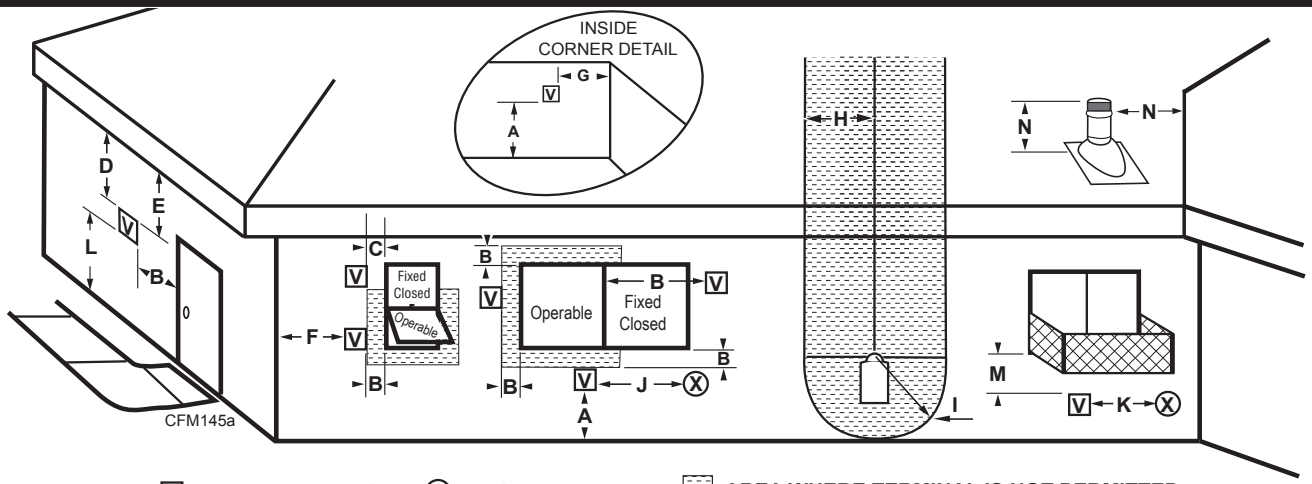
There must not be <u>any</u> obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24” (610mm) from the front of the termination hood.

Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

**Location of Vent Termination**

It is imperative the vent termination be located observing the minimum clearances as shown on following page.

## General Venting Information - Termination Location




CFM145 V VENT TERMINATION X AIR SUPPLY INLET AREA WHERE TERMINAL IS NOT PERMITTED

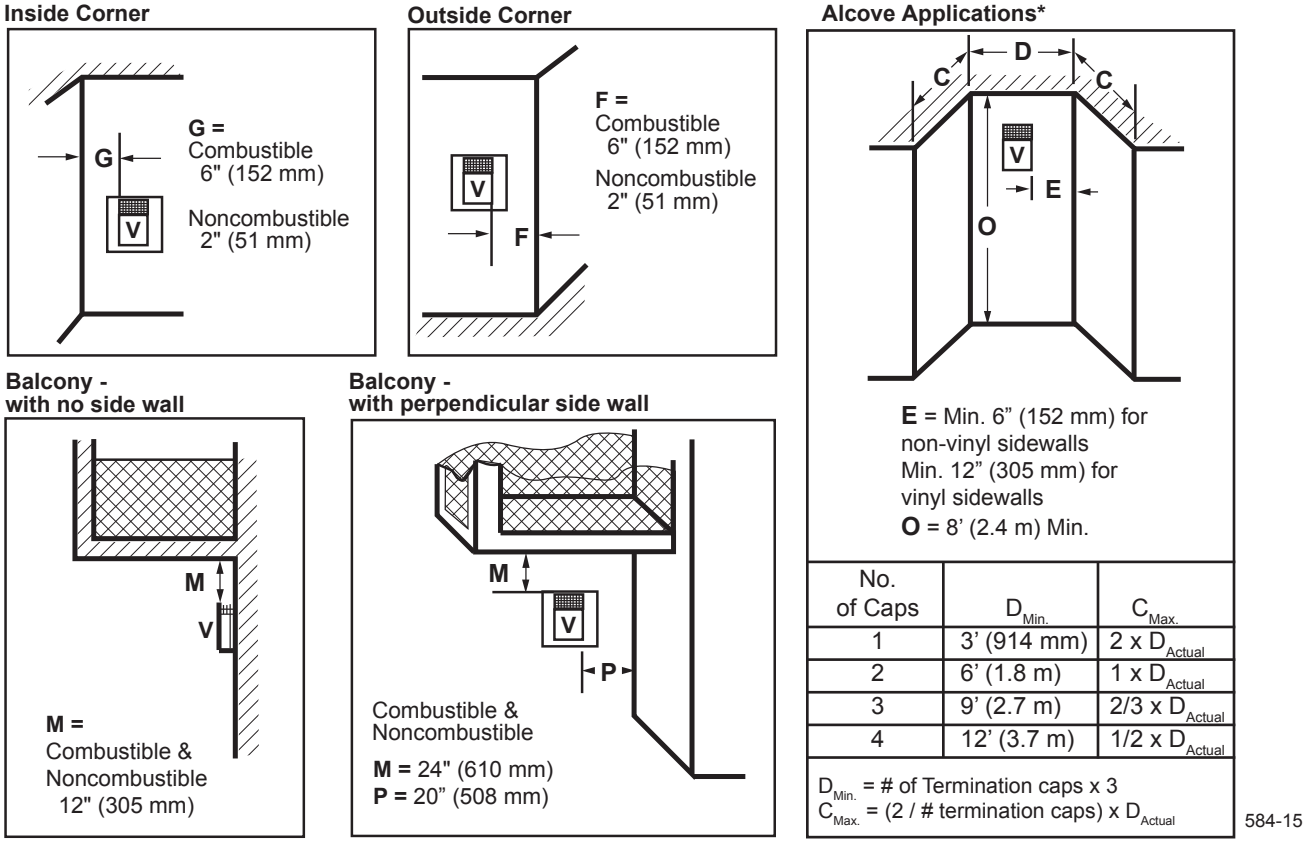
| | Canadian Installations[1] | US Installations[2] |
|---|---|---|
| A = Clearance above grade, veranda, porch, deck, or balcony | 12” (30 cm) | 12” (30 cm) |
| B = Clearance to window or door that may be opened | 6” (15 cm) for appliances < 10,000Btuh (3kW), 12” (30 cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36” (91 cm) for appliances > 100,000 Btuh (30kW) | 6” (15 cm) for appliances < 10,000 Btuh (3kW), 9” (23 cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12” (30 cm) for appliances > 50,000 Btuh (15kW) |
| C* =Clearance to permanently closed window | 12” (305 mm) recommended to prevent window condensation | 12” (305 mm) recommended to prevent window condensation |
| D* =Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2’ (610mm) from the center line of the terminal | 18” (458 mm) ***CAUTION: Clearances to soffit do not apply to “vinyl soffits”.** | 18” (458 mm) |
| E = Clearance to unventilated soffit | 24” (610 mm) | 24” (610 mm) |
| F = Clearance to outside corner | see next page | see next page |
| G = Clearance to inside corner (see next page) | see next page | see next page |
| H = Clearance to each inside of center line extended above meter/regulator assembly | 3’ (91 cm) within a height of 15’ (5m) above the meter/regulator assembly | 3’ (91 cm) within a height of 15’ (5 m) above the meter/regulator assy |
| I = Clearance to service regulator vent outlet | 3’ (91 cm) | 3’ (91 cm) |
| J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances | 6” (15 cm) for appliances < 10,000 Btuh (3kW), 12” (30 cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36” (91 cm) for appliances > 100,000 Btuh (30kW) | 6” (15 cm) for appliances < 10,000 Btuh (3kW), 9” (23 cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12” (30cm) for appliances > 50,000 Btuh (15kW) |
| K = Clearance to a mechanical air supply inlet | 6’ (1.83 m) | 3’ (91 cm) above if within 10’ (3 m) horizontally |
| L = Clearance above paved sidewalk or paved driveway located on public property | 7’ (2.13 m)† | 7’ (2.13 m)† |
| M = Clearance under veranda, porch, deck or balcony | 12” (30 cm)‡ | 12” (30 cm)‡ |
| N = Clearance above a roof shall extend a minimum of 24” (610 mm) above the highest point when it passes through the roof surface, and any other obstruction within a horizontal distance of 18” (450 mm). | | |

1 In accordance with the current CSA-B149 Installation Codes
2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes
† A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings
‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:
NOTE: 1. Local codes or regulations may require different clearances.
2. The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.
3. CFM Corporation assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

**Fig. 11** Vent termination clearances.

## Termination Clearances

Termination clearances for buildings with combustible and noncombustible exteriors.




| No. of Caps | $D_{Min.}$ | $C_{Max.}$ |
|---|---|---|
| 1 | 3' (914 mm) | 2 x $D_{Actual}$ |
| 2 | 6' (1.8 m) | 1 x $D_{Actual}$ |
| 3 | 9' (2.7 m) | 2/3 x $D_{Actual}$ |
| 4 | 12' (3.7 m) | 1/2 x $D_{Actual}$ |

$D_{Min.}$ = # of Termination caps x 3
$C_{Max.}$ = (2 / # termination caps) x $D_{Actual}$

584-15

***NOTE:** Termination in an alcove space (spaces open only on one side and with an overhang) is permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be a 3' (914 mm) minimum between termination caps. 2. All mechanical air intakes within 10' (1 m) of a termination cap must be a minimum of 3' (914 mm) below the termination cap. 3. All gravity air intakes within 3' (914 mm) of a termination cap must be a minimum of 1' (305 mm) below the termination cap.

**Fig. 12** Termination clearances.

# General Information Assembling Vent Pipes

## SK8 Venting Pipes

**Canadian Installations:**

The venting system must be installed in accordance with the current CSA-B149 .1 installation code.

**USA Installations:**

The venting system must conform with local codes and/or the current National Fuel Gas code ANSI Z223.1/NFPA 54.

Only venting components manufactured by CFM Corporation can be used in Direct Vent systems.

**NOTE:** The joints of the inner pipe (flue pipe) must be taped with 550°F or higher temperature metal adhesive tape that meets the requirements of F.A.R. 25.853(a). High temperature sealant milpack or stove cement of 550°F or higher could be used instead. The joints of The outer pipe (fresh air pipe) must be taped with 315°F or higher temperature metal adhesive tape or the use of high temperature milpack or stove cement would be applicable. When using the unitized 30°, 45° or 90° elbows, apply 1/4" bead of high temperature, 550°F or higher, sealant (milpack or stove cement) to the joint of the inner pipe (flue pipe) and the straight section as it is impossible to be taped. The outer pipe must be taped with 315°F high temperature metal adhesive tape for proper sealing.

Start by attaching the first vent pipe section to the collar on top of the fireplace. In order to attach the first pipe section, it may be necessary to remove the top shield. Remove four (4) screws securing top shield, install first pipe section and replace top shield.

Install the pipe as shown in Figure 13. When you get a good lock, you will hear the pipe clearly snap together. Once sections are snap-locked in place, it is extremely difficult to get them apart. Make sure the pipe is firmly snapped and locked together as each pipe section is mounted.

When installing elbows, follow the same procedure. The joints of inner and outer elbow must be taped with UL approved high temperature metal adhesive tape for

proper sealing. Be sure to always attach straps on upper elbow to a structural framing member.

For vertical installations, continue installing the pipe as required until pipe is installed up through the ceiling. At this point, you must install a firestop spacer.

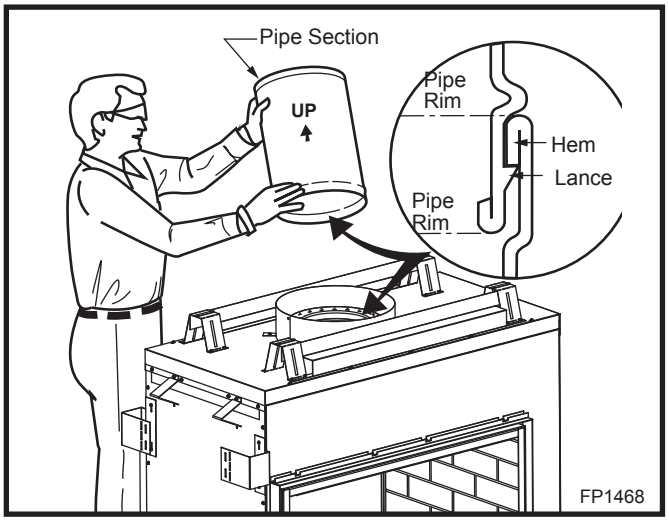



**Fig. 13** Install pipe, listening for the snap-lock to fasten.

## Horizontal Termination

The vent must rise vertically a minimum of 24" (610 mm) off the top of the unit, before the first elbow. The horizontal run may extend up to 20' (6 m) and include a vertical rise of up to 40' (12 m). (Fig. 15) Horizontal termination must also meet the criteria shown in Figures 11 & 12.

- Approved vent systems must terminate above and including the heavy line in Figure 14.
- Two 45° elbows may be substituted for each single 90° elbow.
- With a rise between 2' - 4', one (1) 90° or two (2) 45° elbows may be used.

## Vertical Termination

A vertical vent system must terminate no less than 12' (3.66 m) and no more than 40' (12 m) above the appliance flue collar. A 2' (610 mm) vertical section must be installed before any offset. A maximum of 20' (6.1 m) horizontal and three (3) 90° elbows may be installed with a minimum of 12' (3.66 m) vertical section above the flue collar of the unit. Refer to Page 19, Figure 15 for more information.

A vertically terminated vent system must also conform to the following criteria:

- No more than three (3) 90° elbows may be used.
- Two (2) 45° elbows may be substituted for one (1) 90° elbow. No more than six (6) elbows may be used.
- Vent must rise a minimum of 2' (610 mm) before offset is used.
- Termination height must conform to roof clearance as specified in Figure 38.

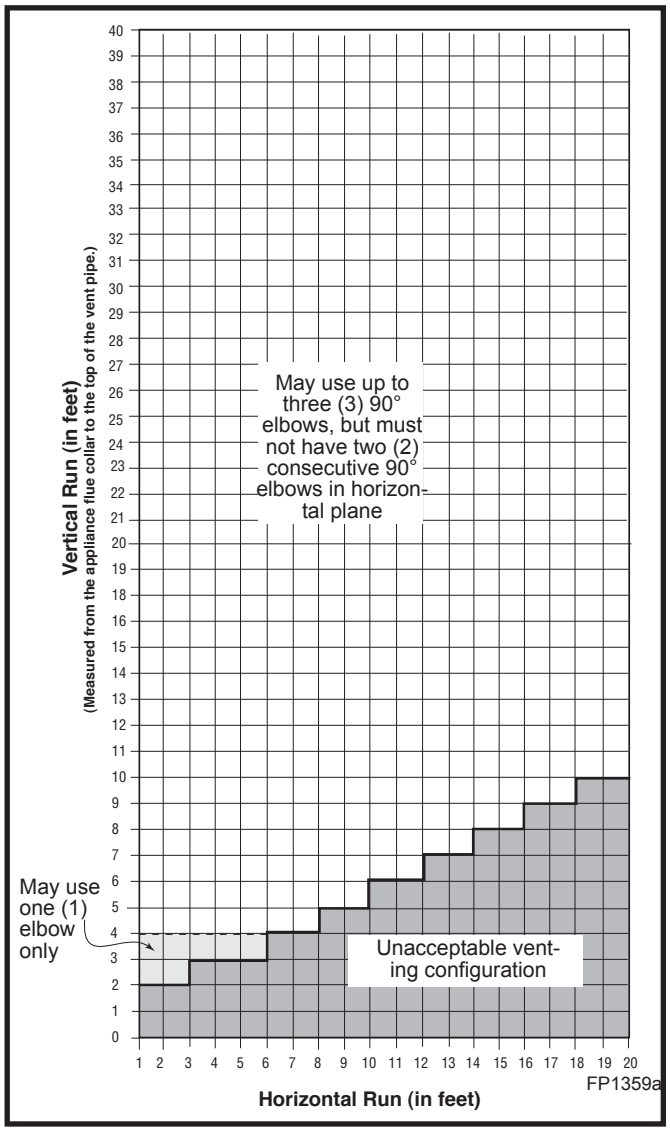

Vertical Run (in feet)
(Measured from the appliance flue collar to the top of the vent pipe.)
May use up to three (3) 90° elbows, but must not have two (2) consecutive 90° elbows in horizontal plane
May use one (1) elbow only
Unacceptable venting configuration
Horizontal Run (in feet)
FP1359a

**Fig. 14** Horizontal vent termination window.

## Sidewall Applications

**Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.**

The vent graph showing the relationship between vertical and horizontal side wall venting will help to determine the various dimensions allowable.

**Minimum clearance between vent pipes and combustible materials is 3½" (89 mm) on top, 2½" (64 mm) on both sides and 1½" (38 mm) on the bottom.**

When the vent termination exits through foundations less than 20” (508 mm) below siding outcrop, the vent pipe must be flush with the siding.

It is always best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length of vent pipe from the flue collar of the fireplace to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.

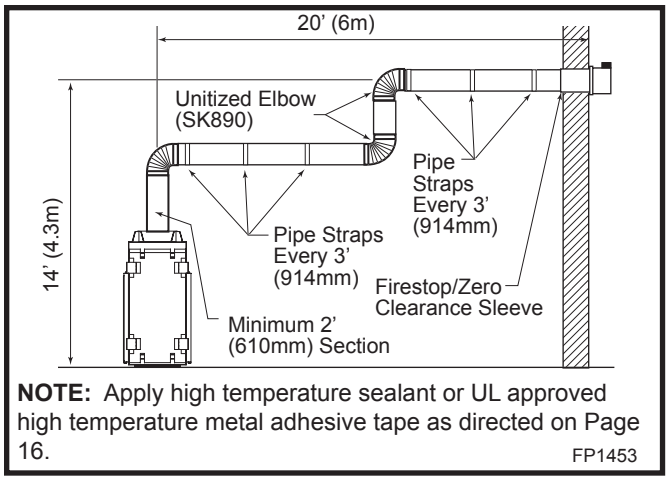



**Fig. 15** Support straps for horizontal runs.

- The maximum number of 90° elbows per side wall installation is three (3), but must not have two (2) consecutive elbows in the horizontal plane.
- A minimum of 2’ (610 mm) vertical section off the top of the unit is required, an elbow and a 1’ (305 mm) maximum horizontal run to get through a wall. (Fig. 16)
- The maximum number of 45° elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run. (Fig. 16)

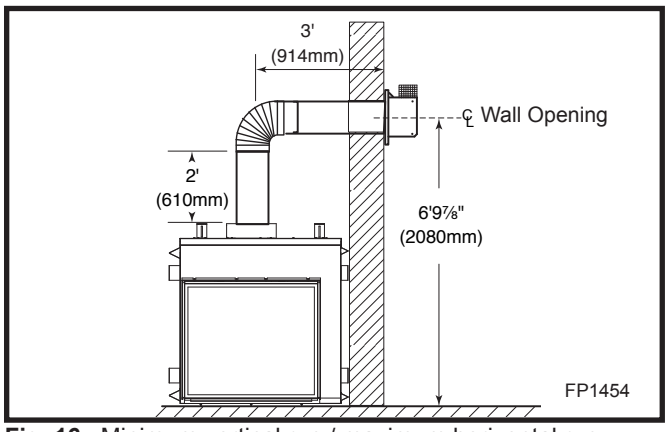



**Fig. 16** Minimum vertical run / maximum horizontal run.

- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18” (45 cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.

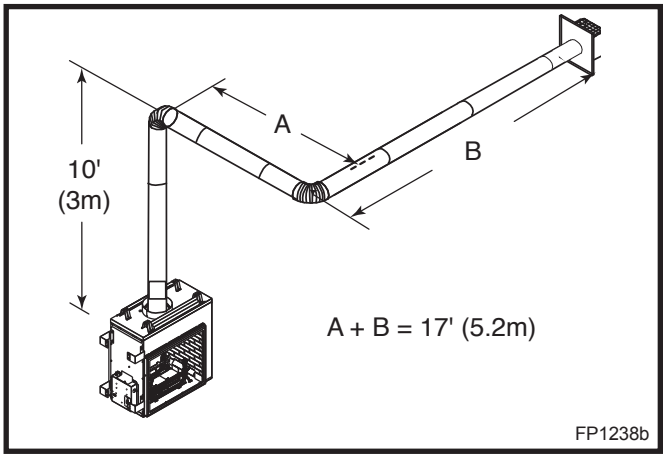



**Fig. 17** Maximum vent run with elbows.

For each 90° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 36” (914 mm).

- The maximum number of elbow degrees in a system is 270°. (Fig. 17)

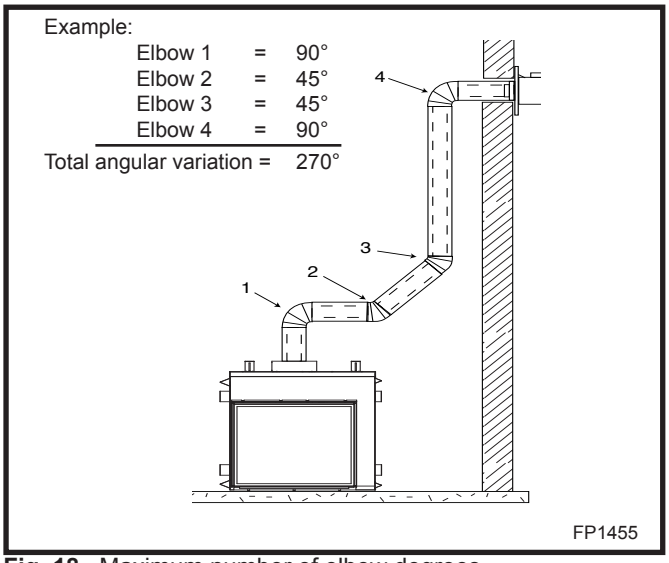



**Fig. 18** Maximum number of elbow degrees.

## Sidewall Installation

**STEP 1**

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. (Fig. 19)

For combustible walls first frame in opening.

**Combustible Walls:** Cut a 16¼”H x 16¼” W (413 x 413 mm) hole through the exterior wall and frame as shown.

**Noncombustible Walls:** Hole opening must be 11¼” (286 mm) in diameter.

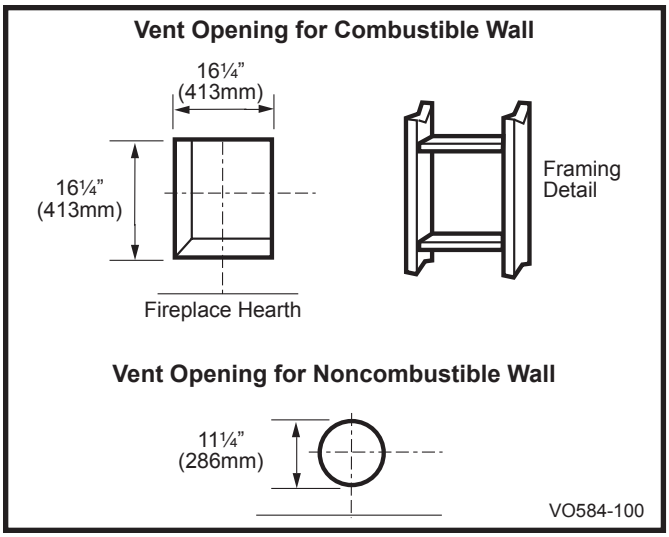



**Fig. 19** Locate vent opening on wall.

**STEP 2**

Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve using #8 sheet metal screws (supplied). (Fig. 20) Install firestop assembly. (Fig. 35)

**Zero clearance sleeve is only required for combustible walls.**

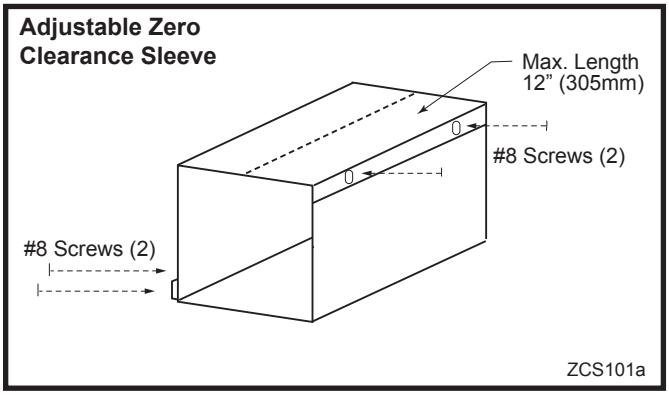



**Fig. 20** Adjustable zero clearance sleeve.

**STEP 3**

Slide the zero clearance sleeve through the wall and install the firestop on the inside surface of the wall. Secure with four (4) #8 sheet metal screws.

**STEP 4**

Place fireplace into position. (Fig. 21) Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. **NOTE:** If using the SK8DVSK Kit, the vertical section of pipe is telescopic and could provide adjustment from 24" up to 40" (610 to 1016 mm).

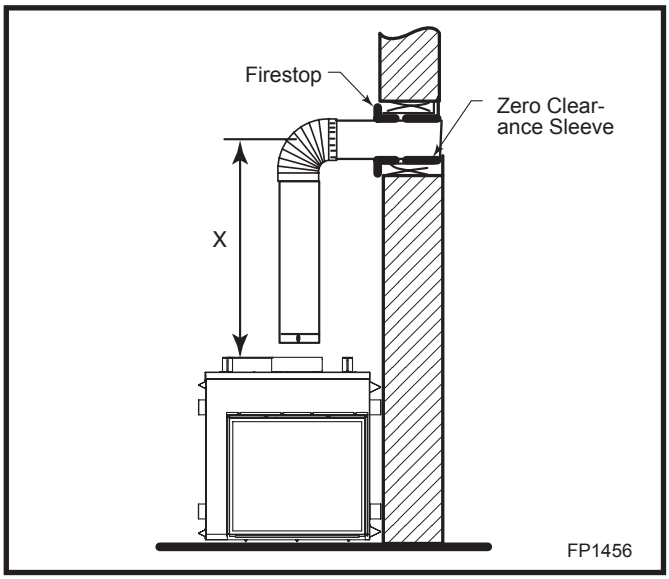



**Fig. 21** Vertical height requirement.

**STEP 5**

Tape the inner and outer flue collars of the fireplace using UL approved metal adhesive tape to ensure the joints are sealed. Attach an appropriate length of vent pipe to the fireplace. Follow with the installation of the inner and outer elbow, tape elbow joints and secure joints as described on Page 17.

**STEP 6**

Measure the horizontal length requirement including a 2" (51 mm) overlap, ie from the elbow to the outside wall face plus 2" (51 mm) (or the distance required if installing a second 90° elbow). (Fig. 22)

**Always install horizontal venting on a level plane.**

**STEP 7**

Use appropriate length of pipe sections and install the horizontal vent sections. You may need to cut 1' wall section to size to be flush with the outside wall. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary. (Fig. 23)

**Sealing firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.**

**STEP 8**

Guide the vent terminations 8" and 11" collars into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. (Fig. 24) As an alternative to screwing the termination directly to the wall you may also use expanding plugs or an approved exterior construction adhesive.

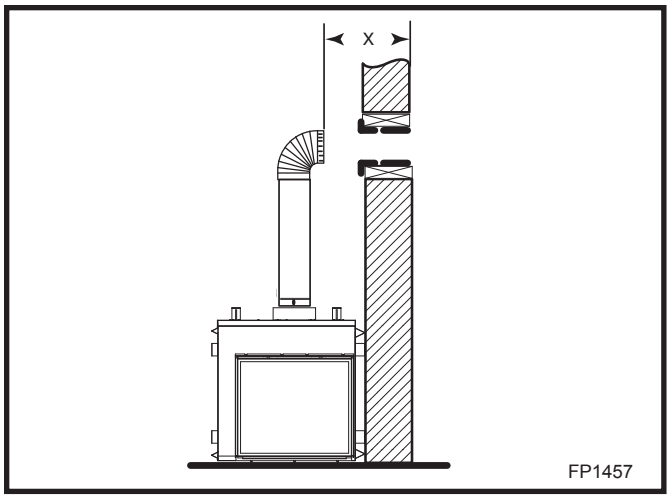



**Fig. 22** Horizontal length requirement.

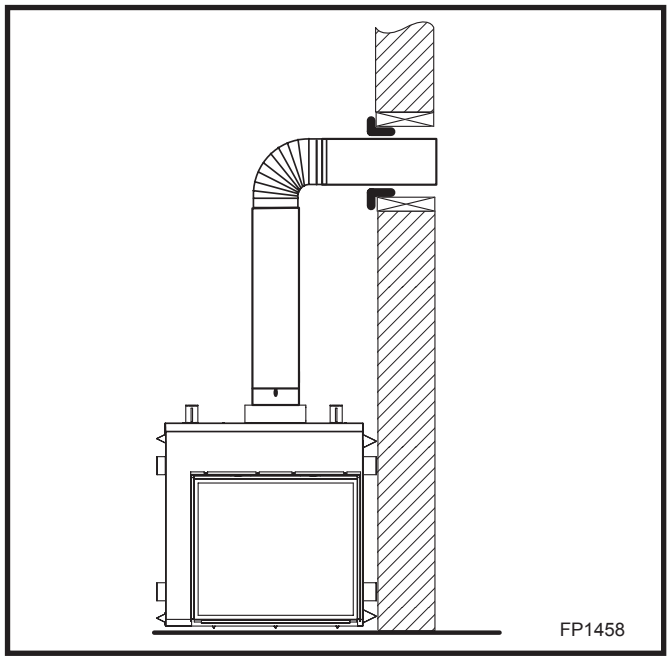



**Fig. 23** Through the wall.

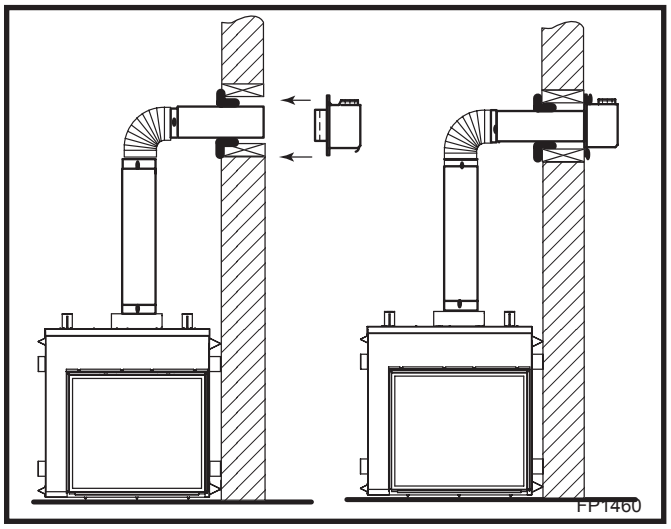



**Fig. 24** Secure termination to wall.

**Support horizontal pipes every 3' (914 mm) with metal pipe straps.**

**Check fireplace to make sure it is levelled and properly positioned.**

## Sidewall Installation with Stationary Glass Facing Outside

**CAUTION: Unit must be installed with stationary glass facing outside. (Control housing will be located on the left side of the unit when facing the unit from inside the house.)**

**Failure to do so will result in a major reconstruction and CFM Corporation will not be responsible for costs associated with incorrect installation..**

**STEP 1**

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. (Fig. 19)

For combustible walls first frame in opening.

**Combustible Walls:** Cut a 16¼"H x 16¼" W (413 x 413 mm) hole through the exterior wall and frame as shown.

**Noncombustible Walls:** Hole opening must be 11¼" (286mm) in diameter.

**STEP 2**

Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve using #8 sheet metal screws (supplied). (Fig. 20) Install firestop assembly. (Fig. 35)

**Zero clearance sleeve is only required for combustible walls.**

**STEP 3**

Slide the zero clearance sleeve through the wall and install the firestop on the inside surface of the wall. Secure with four (4) #8 sheet metal screws.

**STEP 4**

Place fireplace into position. (Fig. 21) Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. **NOTE:** If using the SK8DVSK Kit, the vertical section of pipe is telescopic and could provide adjustment from 24" up to 40" (610 to 1016). Through the wall section shipped with the starter kit will not be used when going through the wall.

**STEP 5**

Tape the inner and outer flue collars of the fireplace using UL approved metal adhesive tape to ensure the joints are sealed. Attach an appropriate length of vent pipe to the fireplace. Follow with the installation of the inner and outer elbow, tape elbow joints and secure joints as described on Page 17.

**Sealing firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.**

**STEP 6**

Before installing the termination, a 2" (51 mm) thick trim or frame is required around the 16¼" x 16¼" (413 x 413 mm) square opening to allow the vent termination to go directly onto the elbow. (Fig. 25)

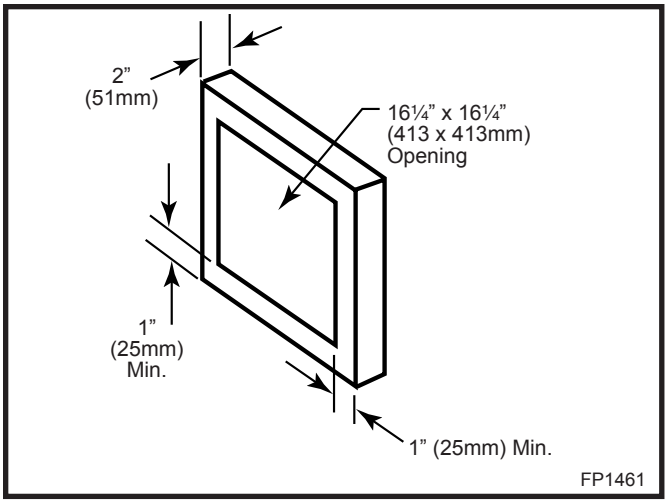



**Fig. 25** A 2" (51mm) thick trim is required around opening.

**STEP 7**

Guide the vent terminations 8" and 11" collars into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. (Fig. 25) As an alternative to screwing the termination directly to the wall you may also use expanding plugs or an approved exterior construction adhesive.

## Installing the 38S2VDK Door

When installing the DVT38S2 on an outside wall, the following steps must be taken into consideration. **Failure to do so will result in a major reconstruction and CFM Corporation will not be responsible for costs associated with incorrect installation.**

- If the fireplace is to be installed flush with the wall, a 1/4" (6 mm) clearance is required on both sides and top of surround around the glass frame assembly in order for the door to be accessible. (Refer to Page 5, Fig. 1)
- If the fireplace is recessed 3/4" (19 mm) from the wall, then no extra clearances are needed around the surround.
- The fireplace must be installed with the stationary glass facing the outside (control housing will be located on the left hand side of the fireplace when facing the fireplace from inside the house).
- The control housing must only be installed on an inside wall.

Package contents:

- 1, Glass frame assembly
- 2, Short top brackets
- 2, Long bottom brackets
- 2, short machine screws
- 2, Long machine screws
- 4, sheet metal screws

## Installation Procedure

1. If the fireplace is installed flush with the wall, a high temperature sealant must be applied to seal around the surround around the glass frame assembly 3/4" (19 mm) from the front edge of the surround. (Fig. 26)

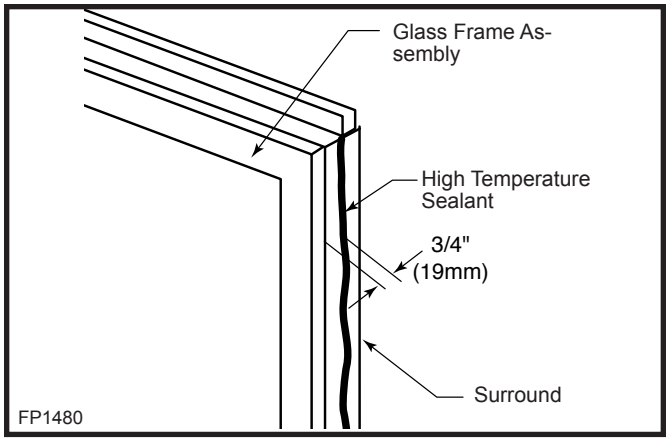



**Fig. 26** Apply high temperature sealant on surround around glass frame assembly when unit is installed flush with wall.

2. Install the two (2) bottom (longer) brackets, using sheet metal screws, at the bottom right and left corners of the unit. (Fig. 27)

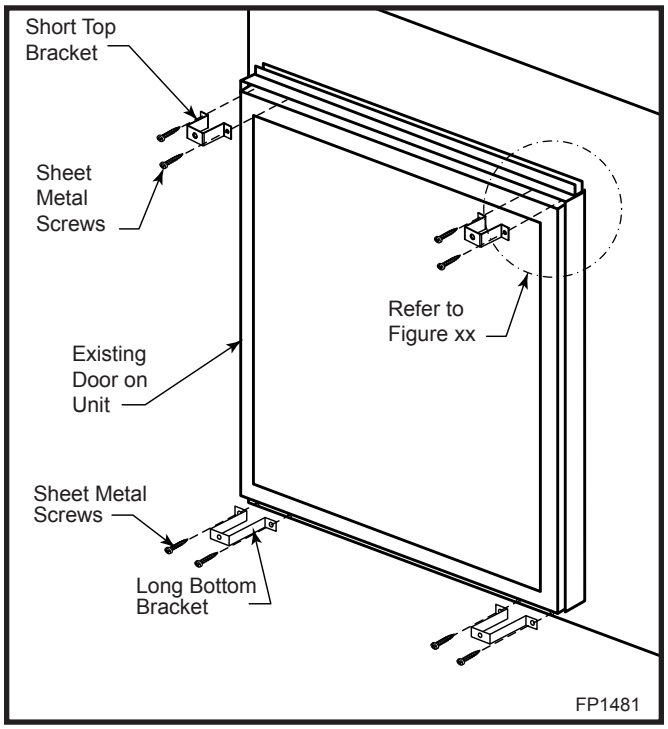



**Fig. 27** Use sheet metal screws to attach brackets to existing holes under glass frame assembly.

3. Install the two (2) short brackets, using sheet metal screws, at the top right and left corners of the fireplace window frame. (Fig. 27) **NOTE:** If top corners of the window frame do not have two (2) pre-drilled holes, you must drill these holes per Step 4.
4. For window frames not having pre-drilled holes: Align the short brackets so the edge of the bracket is exactly aligned with the side edge of the fireplace window's top flange, as shown in Figure 28. Mark the location of the holes using a pencil mark through the bracket holes. Drill 1/8" holes at each of the four (4) locations. Mount brackets using four (4) sheet metal screws.
5. Set the Vista door assembly provided with your kit in front of the glass frame assembly on the fireplace (the outside side).
6. Have the machine screws provided with the kit within reach.
7. Slide the Vista door assembly over the fireplace window frame aligning the four (4) holes with the four (4) brackets.
8. Using the machine screws, attach the Vista door to the four (4) brackets. Do not overtighten.

**WARNING:** The glass frame assembly provided with the fireplace must be left in place for proper operation. Failure to do so could cause property damage and malfunction of the fireplace.

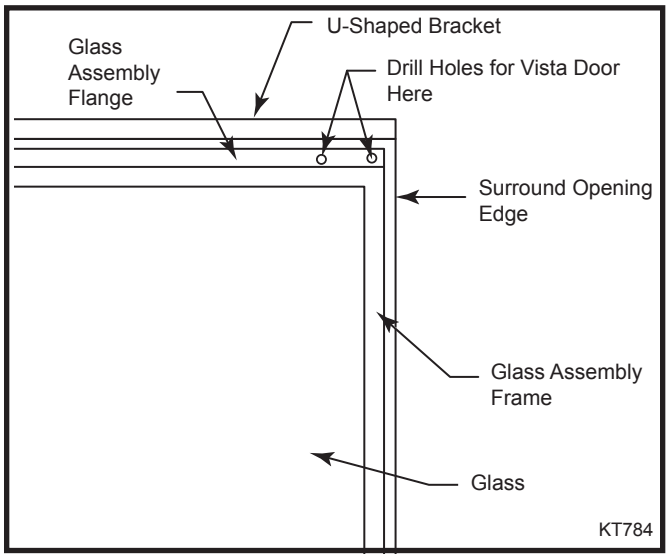



**Fig. 28** Vista door top hole locations.

## Vertical Through-the-Roof Applications

## Use of Restrictor Plate for Vertical Venting Application

The primary purpose for the vent restrictor is to regain flame height under certain venting conditions as outlined below.

## Flue Restrictor Plate Installation

Refer to Page 18 for your venting configuration and combination of restrictor plate requirement.

**Flue Restrictor Plate Guide**

| Typical Applications | NG | LP |
|---|---|---|
| SK8DVSK or 2' (610mm) vertical, 2' (610mm) horizontal | None | None |
| 4' (1.2m) vertical, 10' (3m) horizontal, 8' (2.4m) vertical | None | 4½" flue restrictor |
| 12' (3.7m) vertical & greater | 6¾" flue restrictor | 6¾" flue restrictor |

**Restrictor Plate Installation**

Using the two (2) screws provided along with the flue restictor plate shipped with the logset, fasten the restrictor plate to the firebox top through the front of the unit. (Fig. 29)

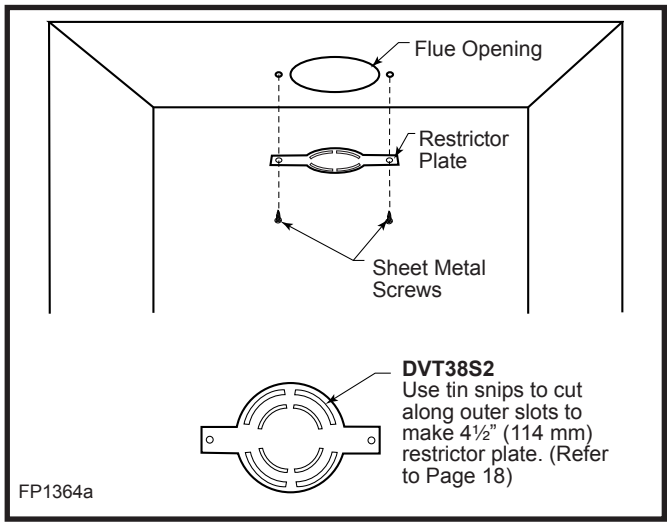

Flue Opening
Restrictor Plate
Sheet Metal Screws
DVT38S2
Use tin snips to cut along outer slots to make 4½" (114 mm) restrictor plate. (Refer to Page 18)
FP1364a

**Fig. 29** Restrictor plate location.

**NOTE:** The joints of the inner pipe (flue pipe) must be taped with 550°F or higher temperature metal adhesive tape that meets the requirements of F.A.R. 25.853(a). High temperature sealant milpack or stove cement of 550°F or higher could be used instead. The joints of The outer pipe (fresh air pipe) must be taped with 315°F or higher temperature metal adhesive tape or the use of high temperature milpack or stove cement would be ap-

plicable. When using the unitized 30°, 45° or 90° elbows, apply 1/4" bead of high temperature, 550°F or higher, sealant (milpack or stove cement) to the joint of the inner pipe (flue pipe) and the straight section as it is impossible to be taped. The outer pipe must be taped with 315°F high temperature metal adhesive tape for proper sealing.

For vertically venting either propane or natural gas units, with vertical vent heights of 12' (3.7 m) or greater, (measured from the top of the flue collar) the flue restrictor plate as supplied with this unit should be used. (Fig. 30) Refer to Figure 29 for flue restrictor plate installation.

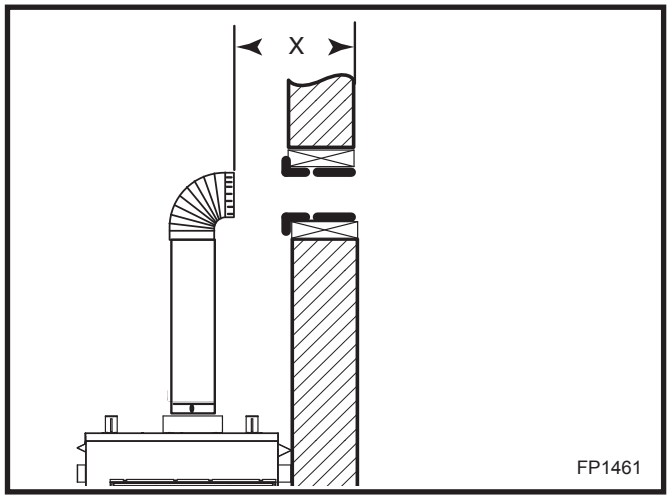



**Fig. 30** Flue restrictor plate use in straight up installation.

For LP gas venting straight vertical with 20' (6 m) or more, adjust the primary air to the burner housing as well as the fresh air to the unit by doing the following:

1. Remove glass, logs, glowing embers (if installed).
2. Remove andirons, fettles and burner housing.
3. Remove the two (2) screws securing the deflector and the rectangular restrictor plate in place. (Fig. 31) Turn the restrictor plate around so the body of the plate will extend down over the air opening.

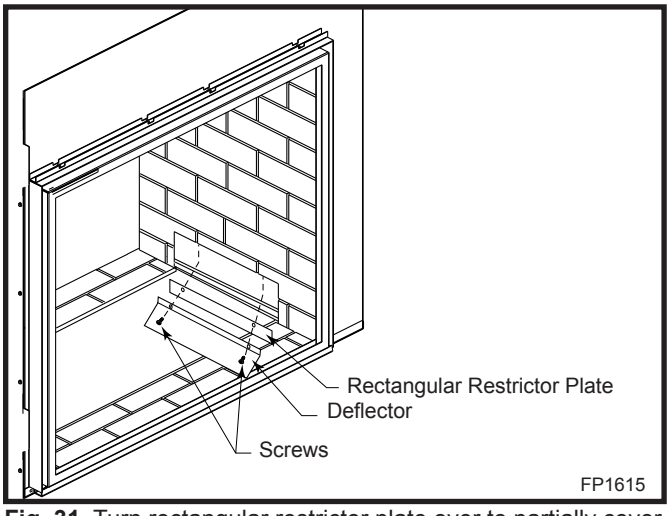



**Fig. 31** Turn rectangular restrictor plate over to partially cover opening.

4. Turn the burner housing upside down. Remove the two (2) screws securing the shutter plate to the bottom of the burner. Turn the shutter plate around so the bottom opening is 1" (25 mm). Replace the screws removed earlier. (Fig. 32)

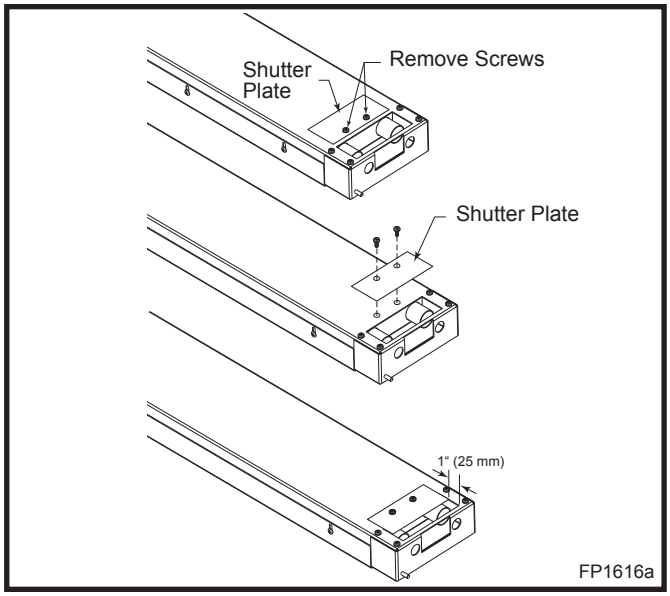



**Fig. 32** Turn shutter plate over to cover opening.

5. Reinstall burner housing, fettle, andirons, logs and glowing embers in reverse order. (Refer to Page 29 for log installation)

For vertical venting configurations that include a minimum vertical rise of 12' (3.7 m) and a maximum horizontal offset of 10' (3 m) the 4½" flue restrictor plate supplied with this unit should be used on LP unit only. (Fig. 33) Refer to Figure 28 for flue restrictor plate installation.

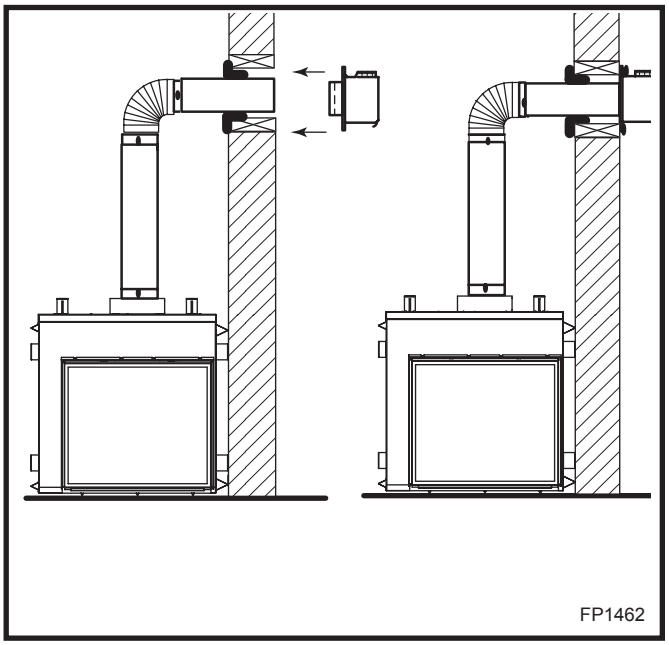



**Fig. 33** Restrictor plate use with horizontal offset.

This Gas Fireplace has been approved for,

- Vertical installations up to 40’ (12 m) in height. Up to a 20’ (6 m) horizontal vent run can be installed within the vent system using a maximum of three (3) 90° elbows. (Fig. 34)
- A 2’ (610 mm) vertical section must be installed before any offset. A maximum of 20’ (6.1 m) horizontal and three (3) 90° elbows may be installed with a minimum of 12’ (3.66 m) vertical section above the flue collar of the unit. (Fig. 34)

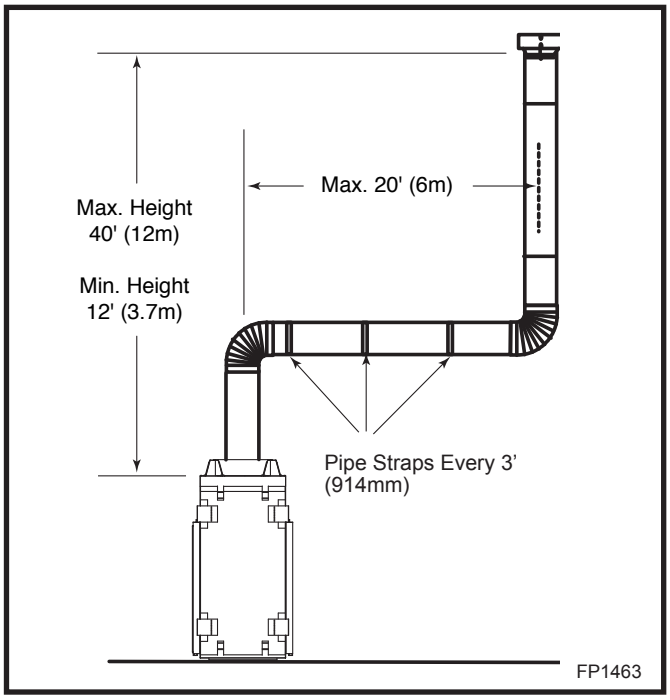



**Fig. 34** Support straps for horizontal runs.

- Up to two (2) 30° or 45° elbows may be used within the horizontal run. For each 30° or 45° elbow used on the horizontal level the maximum horizontal length must be reduced by 18” (457 mm).

  **Example:** Maximum horizontal length

  0 x 30° or 45° elbows = 10’ (3 m)
  1 x 30° or 45° elbows = 8’6” (2.6 m)
  2 x 30° or 45° elbows = 7’ (2.1 m)

- A minimum of a 12’ (3.7 m) vertical rise.
- Two sets of 30° or 45° elbows offsets within these vertical installations. From 0 to a maximum of 8’ (2.4 m) of vent pipe can be used between elbows. (Fig. 35)
- SKCS8 must be used to support offsets. (Fig. 38) This application will require that you first determine the roof pitch and use the appropriate starter kit. (Refer to Venting Components List)
- The minimum height of the vent above the highest point of penetration through the roof is 2’ (610 mm). (Fig. 39)

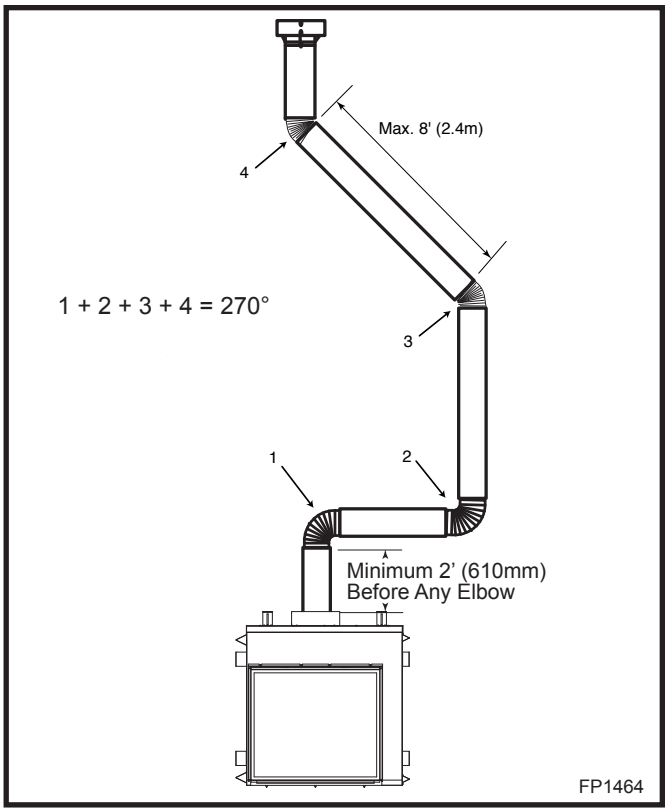



**Fig. 35** Typical offset application.

## Vertical Through-the-Roof Installation

1. Locate your fireplace.
2. Plumb to center of the (8”) flue collar from ceiling above and mark position.
3. Cut opening equal to 14½” x 14½” (368 x 368 mm).
4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1½” (38 mm) clearance to the vent pipe, i.e., the hole must be at least 14½” x 14½” (368 x 368 mm).
5. Place fireplace into position.
6. Place firestop(s) SKFS2A or Attic Insulation Shield AIS-SK into position and secure. (Figs. 36, 37)
7. Install roof support (Fig. 36) and roof flashing making sure upper flange of flashing is below the shingles.
8. Install appropriate pipe sections until the venting is above the flashing.

**NOTE:** Tape the inner and outer flue collars of the fireplace using UL approved metal adhesive tape to ensure the joints are sealed.

9. Seal around the pipe.
10. Add additional vent lengths for proper height. (Fig. 39)

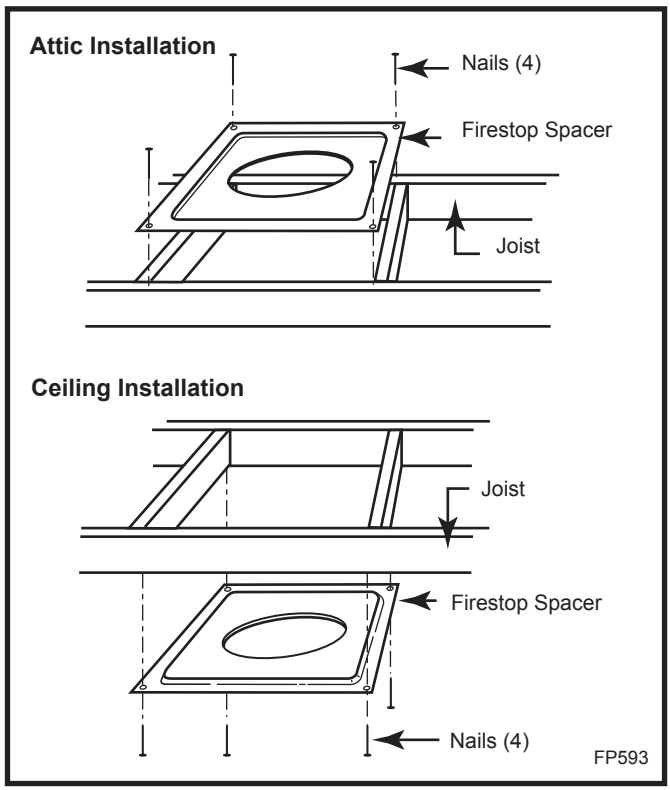



**Fig. 36** Installing firestop spacer.

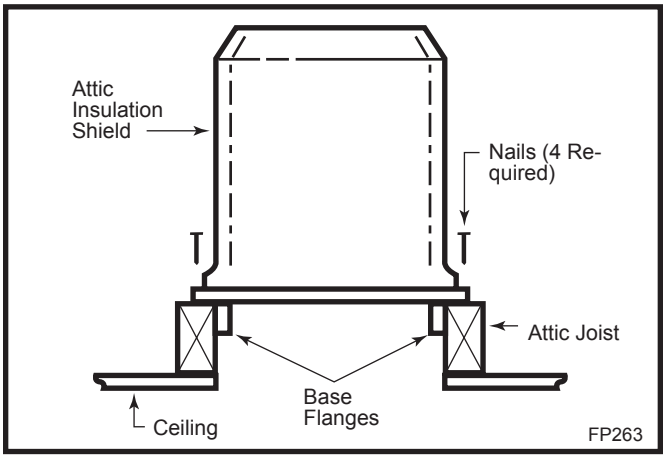



**Fig. 37** Attic shield installation.

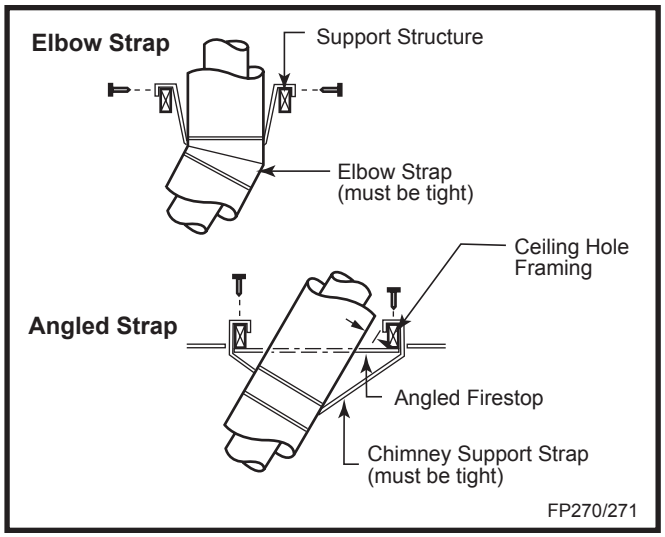



**Fig. 38** Attach straps to a structural framing member.

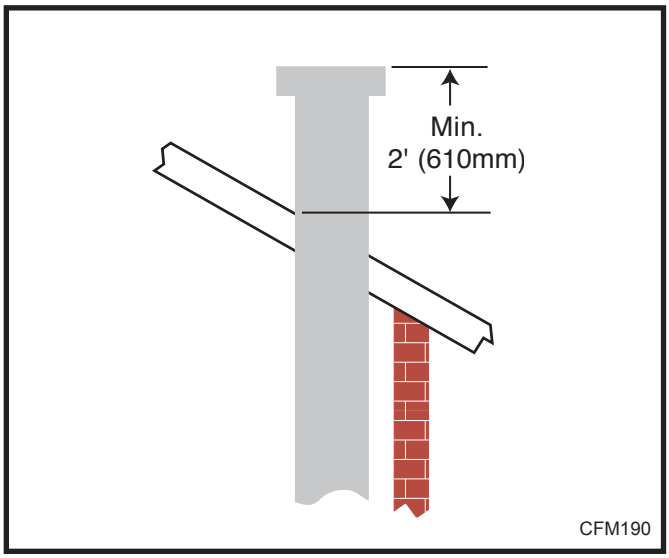



**Fig. 39** Minimum termination to roof clearance.

**If an attic is above ceiling level an AIS-SK (Attic Insulation Shield) must be installed.**

**The enlarged ends of the vent section always face downward.**

# Chimney Components

| Component | Description | Model Number |
|---|---|---|
| Horizontal Starter Kit | Contains 24”-40” telescopic pipe* for minimum vertical rise from collar pipe, 90° elbow, horizontal through-wall starter pipe, zero clearance sleeve, metal adhesive tape, sidewall termination and firestop. | SK8DVSK |
| SK8 Chimney Sections | Pipe used to build 8” (SK8) flue systems. | SK81 (1’ Long)<br>SK818 (1Z\x’ Long)<br>SK83 (3’ Long)<br>SK84 (4’ Long) |
| SK8 Chimney Elbows | Elbow used to create an offset in an 8” chimney system. | SK830-2 30° Elbow*<br>(2 per pkg.)<br>SK845 45° Elbow*<br>SK890 90° Elbow* |
| Firestop | Required at each floor level of chimney installation. (Plus attic on multi-story installation.) | SKFS2A —<br>(8” straight flue)<br>SK8DVFS<br>(Horizontal Firestop) |
| Zero Clearance Sleeve | Used when horizontal pipe goes through an interior vertical wall. | SK8ZCS |
| Attic Insulation Shield | Used to prevent insulation from coming in contact with the chimney system. | AIS-SK |
| Chimney Support | Used to support chimney for each of: 30’ vertical height and 6’ of angled chimney run. | SKCS8 |
| Round Top Termination | Top used to terminate chimney at roof. (Flashing not included.) | RLTSK8 |
| Round Top Termination - Extended | Top used to terminate chimney at chase. (Flashing not included.) | RLTSK8L |
| Flashing | Metal finishing required around termination to prevent rain leakage. | 8-6-12 with 8” flue:<br>0-6/12 pitch<br>8-12-12 with 8” flue:<br>6/12-12/12 pitch |
| Housing Extensions | Extends Square Termination on steep pitched roofs. | 202036 |
| Chase Top Housing | Low profile pyramid-style chimney cap used to terminate chimney through a chase. Includes adapter. (Flashing not included.) | PTLSK8 |
| Chase Top Housing | Square chimney cap used to terminate chimney through a chase. Terra Cotta Masonry. Includes adapter. (Flashing not included.) | SLTSK8 |
| Horizontal Termination | Used to terminate venting through a sidewall. | SK8DVRVT |

**NOTE: The 24”-38” telescopic pipe is only intended for use with the SK8DVSK.**

* Factory unitized elbow

# Operating Instructions

## Glass Information

**Only glass approved by CFM Corporation should be used on this fireplace.**

- The use of any non-approved replacement glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- **Do not operate appliance with glass front removed, cracked or broken.**
- **A replacement glass frame assembly (complete with gasket) is available through your CFM Corporation dealer and should only be installed by a licensed qualified service person.**

**WARNING**

**HOT GLASS** WILL CAUSE BURNS.

**DO NOT TOUCH** GLASS UNTIL COOLED.

**NEVER** ALLOW CHILDREN TO TOUCH GLASS.

## Glass Frame Assembly Removal

1. Turn the fireplace OFF (including the pilot).
2. If the unit has been operating allow time for the components to cool.
3. Using a Phillips screwdriver, unfasten two (2) screws located at the top of the glass frame. (Fig. 40)
4. Tilt the glass frame at the top away from the unit. Lift it carefully off the bottom door track and set on padded surface.

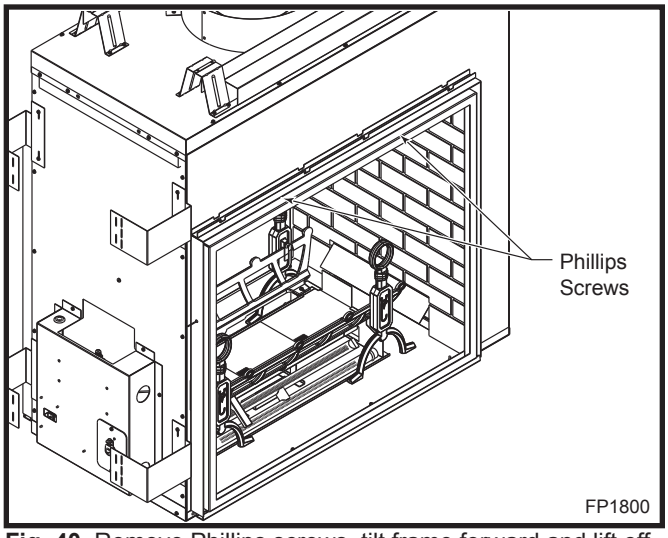



**Fig. 40** Remove Phillips screws, tilt frame forward and lift off bottom door track.

## Glass Cleaning

It is necessary to periodically clean the glass. During start-up, condensation, which is normal, forms on the inside of the glass. This condensation causes lint, dust and other airborne particles to cling to the glass surface.

Also initial paint curing may deposit a slight film on the glass. It is therefore recommended the glass be cleaned two or three times with a non-ammonia based household cleaner and warm water (gas fireplace glass cleaner is recommended) within the first few weeks of operation.

After the initial cleaning process the glass should be cleaned two or three times during each operating season depending on the environment in the house.

**Clean the glass after the first two weeks of operation.**

## Ceramic Refractory Installation

**The ceramic refractories are fragile and should be handled with care. Due to the size of the refractories, an assistant may be helpful.**

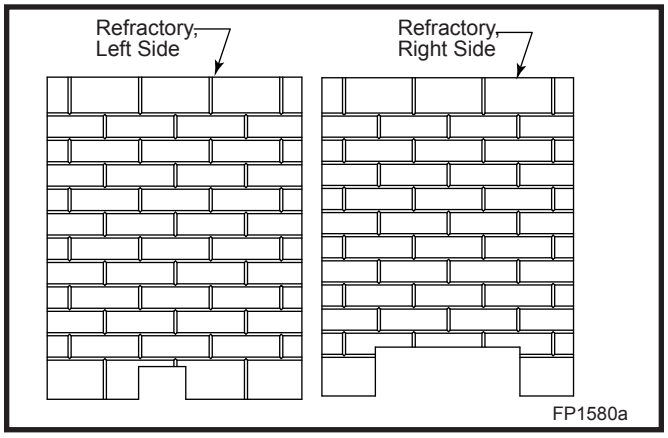



**Fig. 41** Ceramic refractory panels.

1. Using a Robertson screwdriver, remove the two (2) nuts holding each fettle to the burner assembly.
2. Identify the side refractory. The refractory with the small cut out at the bottom must be installed on the side where the plumbing for the pilot and manifold are. The other side refractory has a larger cut out at the bottom. This is designed to allow the opening for the fresh air coming to the combustion chamber unobstructed. (Fig. 41)
3. Start with either the right side refractory or left side refractory. Hold the refractory at an angle. Slide and seat the bottom edge toward the bottom of the

firebox. Tilt it carefully toward the side until the piece is in place. Using the two (2) brackets and four (4) screws provided with the refractory kit, fasten each bracket to the top of the firebox on each side. **NOTE:** Use existing holes in firebox.

4. Place the right and left hearth refractories at on each side of the burner tube assembly.
5. Install the end hearth refractories and align with the right and left hearth refractories already installed.
6. Reinstall the burner tube and fettle.

## Log, Lava Rock and Ember Placement

Unpack the logs from packaging and remove each log from its wrapping material.

**The logs are fragile and should be handled with care. Keep the packaging materials out of the reach of children and dispose of the material in a safe manner.**

**IMPORTANT: Review these instructions and familiarize yourself with each log before beginning log placement. Find the notches, pins and indentations on each log. Follow the instructions closely, using the Log ID (Fig. 42) and the illustrations to assist in correctly placing each log.**

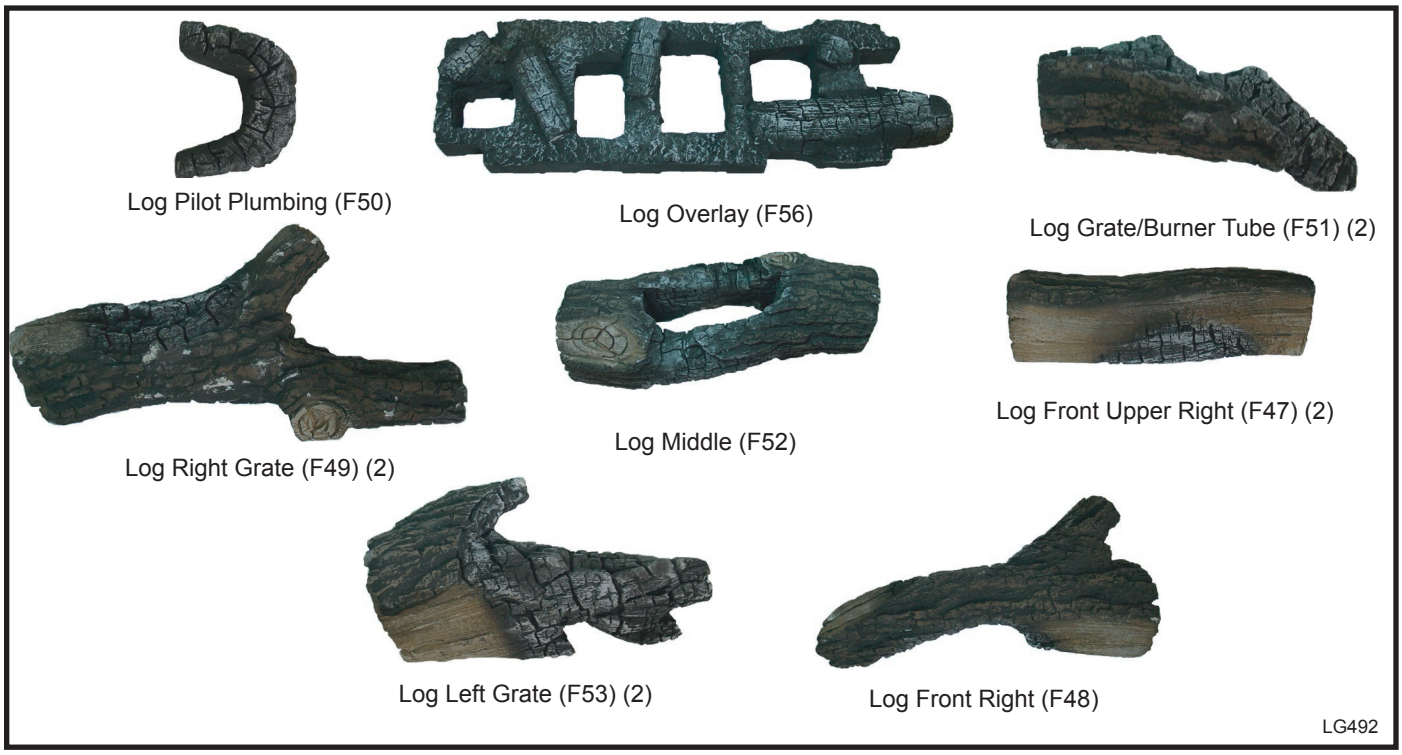

Log Pilot Plumbing (F50)
Log Overlay (F56)
Log Grate/Burner Tube (F51) (2)
Log Right Grate (F49) (2)
Log Middle (F52)
Log Front Upper Right (F47) (2)
Log Left Grate (F53) (2)
Log Front Right (F48)
LG492

**Fig. 42** DVT38Sw log identification.

1. Ensure the four (4) screws that attach the fettle to the burner are secure.
2. Set the andirons in place by hooking the tabs on the back of the andirons over the webs of the fettle. (Fig. 43) Repeat process for andirons on both sides of burner.

**Figure 43**

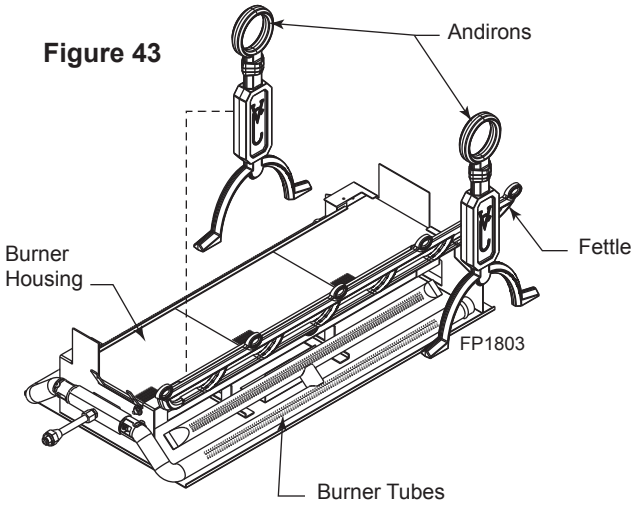
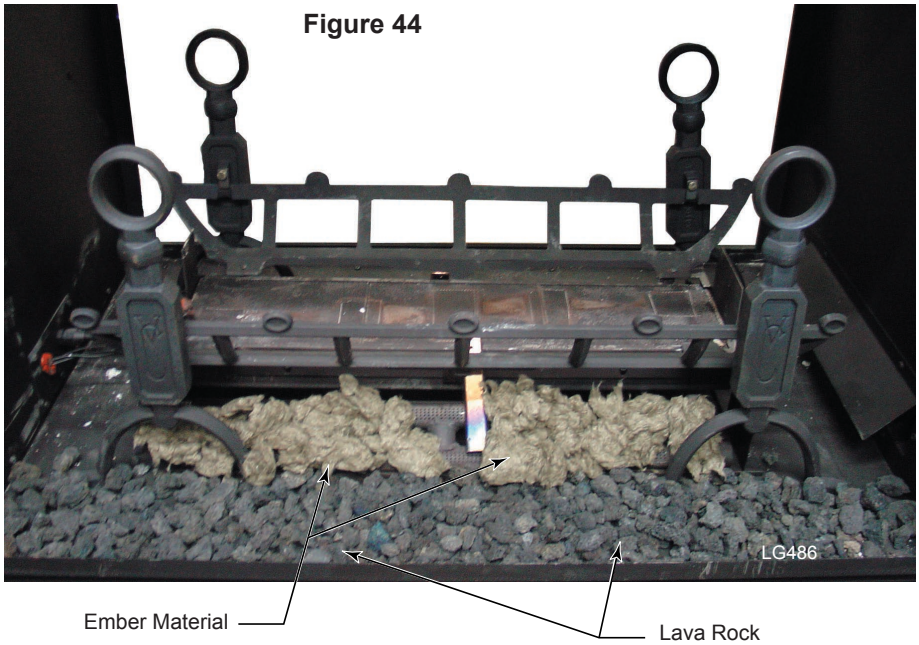



**Figure 44**

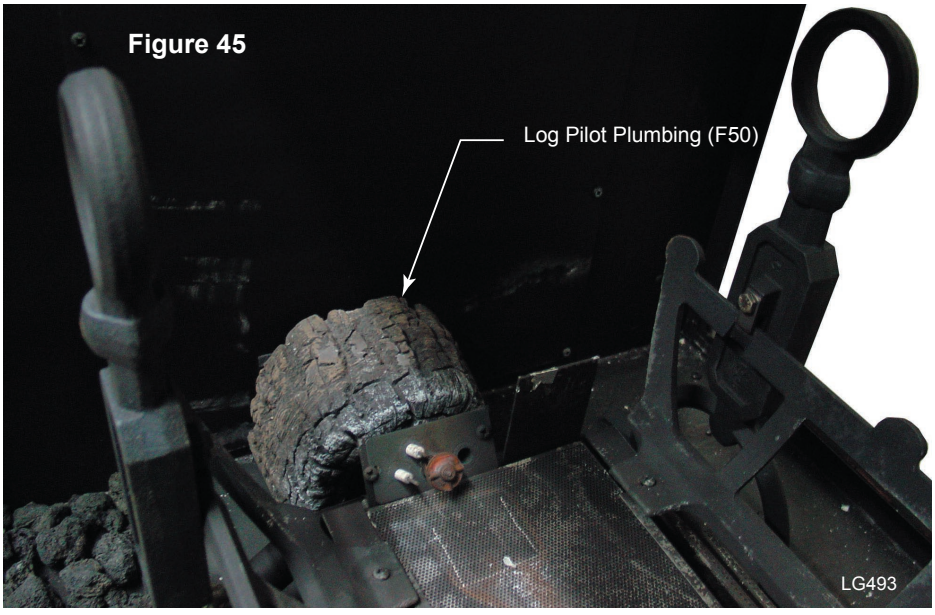



3. Place the volcanic rock in front of each burner tube assembly and around the burner assembly as desired. (Fig. 44) Do not obstruct fresh air inlet with volcanic rock.
4. Place the ember material **lightly,** between each burner tube assembly and the burner housing, between the joined burner tubes and in front over the burner tube and on top of burner tube.

   **NOTE:** The ember material must be built up from the burner tubes to the burner housing fronts in order for the burner tubes to light properly.

5. Position the log pilot plumbing. (Fig. 45) Hold the log with the two (2) branches facing down and set it down over the pilot plumbing with the flat side of the log touching the side refractory.

**Figure 45**



6. Position the log burner overlay. (Fig. 46) The overlay is very fragile and must be handled with extra care. Hold the overlay with the flat surface facing down. The notched corners of the overlay should be on the side of the pilot. Set the overlay on top of the burner housing and align it right to left over the burner housing. Make sure the overlay fits between the two (2) fettles.
7. Position the log grate/burner tube. (Fig. 47) Hold the log with the pointed end down and the flat surface away from you. Slide the wider end of the log at an angle in the third opening “middle” of the fettle. Hook the log on the fettle and set down over the burner tube assembly. Repeat the same procedure on the opposite side.
8. Position the log left grate. (Fig. 48) Hold the log with your left hand with the pointed end toward the right and the flat surface facing down. Set the log on the inside of the fettle toward the left over the overlay and hook the branch and the pointed end of the log through the first and second opening on the fettle by using the second and third tine. When the log is in place, it will be sitting at an angle in the air above the overlay. Repeat this step for opposite side.
9. Position the log middle. (Fig. 48) Familiarize yourself with notches located on the flat surface of the log on each end. These notches are utilized in positioning the log. Hold the log with the flat surface facing down and the burned out end closer to you.

**NOTE**: Position this log through the side with the control valve box on the left side. Set the log using the notches mentioned earlier located on the flat surface of the log and using the center tine on each fettle. When the log is in place, the notches located on the bottom of the log will set directly above the center tine on each fettle.

**Figure 46**

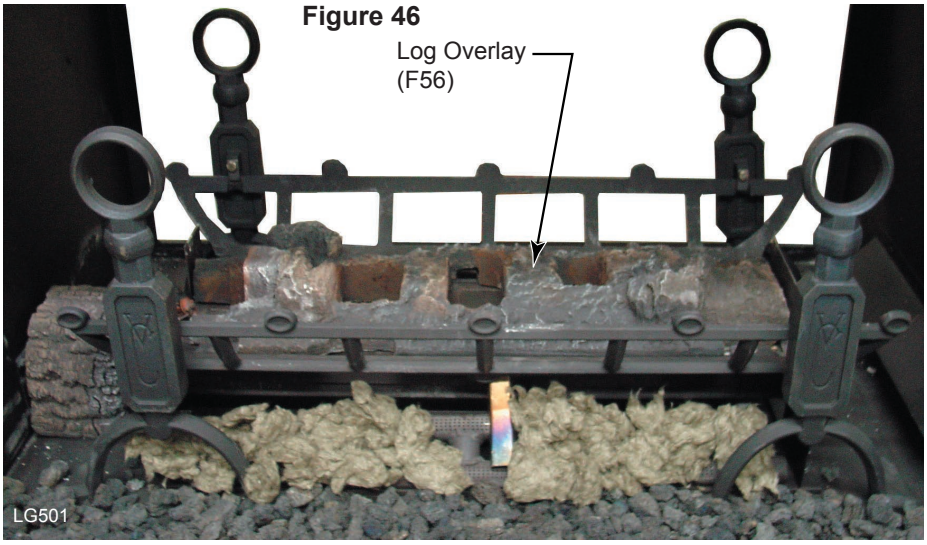



**Figure 47**

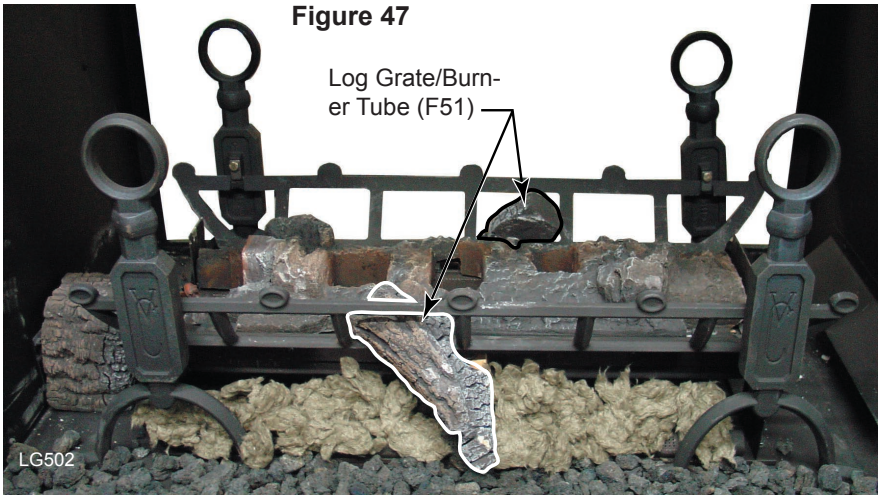



**Figure 48**

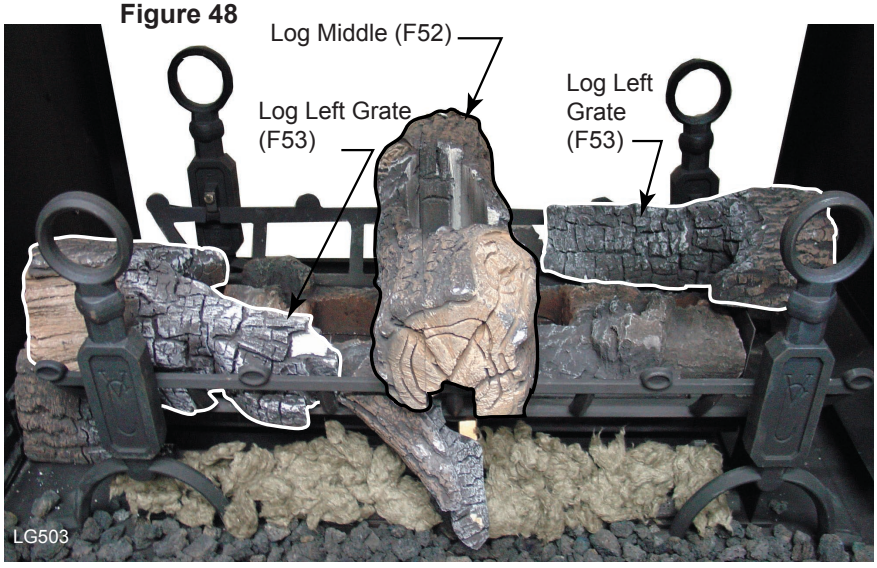
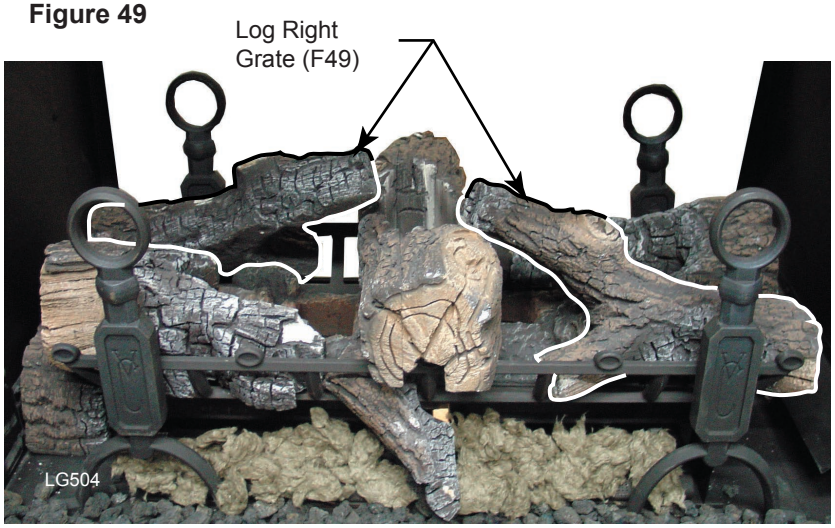
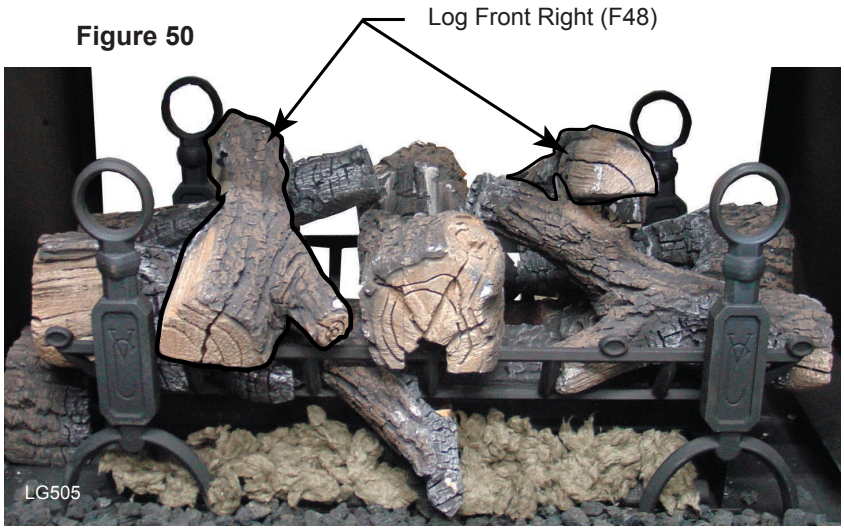


**Figure 49**



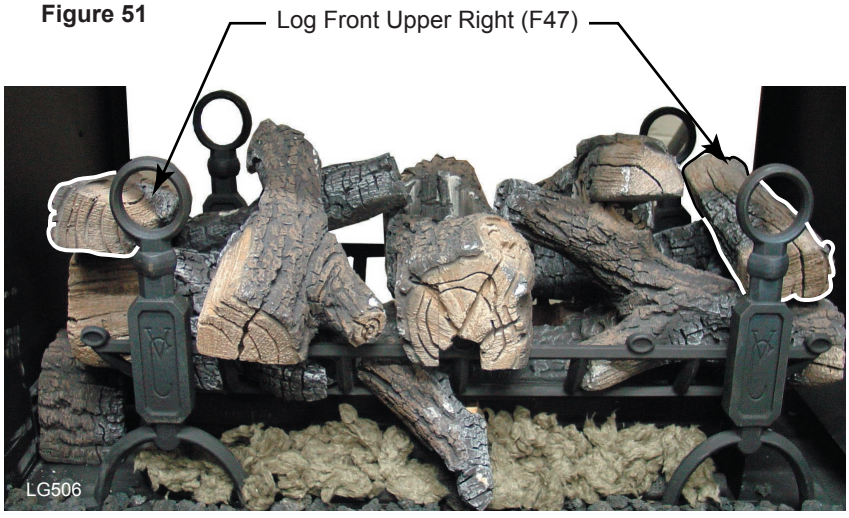

10. Position the log right grate. (Fig. 49) Hold the log with your right hand with the pointed end toward the left and the flat surface facing down. Hook the notch located on the right corner of the log through the first opening on the right hand side of the fettle using the first tine. Bring the log toward you until it comes in contact with the fettle. Then rest the pointed end over the middle log positioned in Step 9. Repeat this step for opposite side.

**Figure 50**




11. Position the log front right. (Fig. 50) Hold the log with the two (2) branches toward you. Set the left branch on the inside of the second tine of the fettle and drop the right branch on the overlay behind the log positioned in Step 7. Lay the other end of the log over the notch located on the log positioned in Step 10. Make sure to clear the opening on the overlay when looking straight down.

**Figure 51**



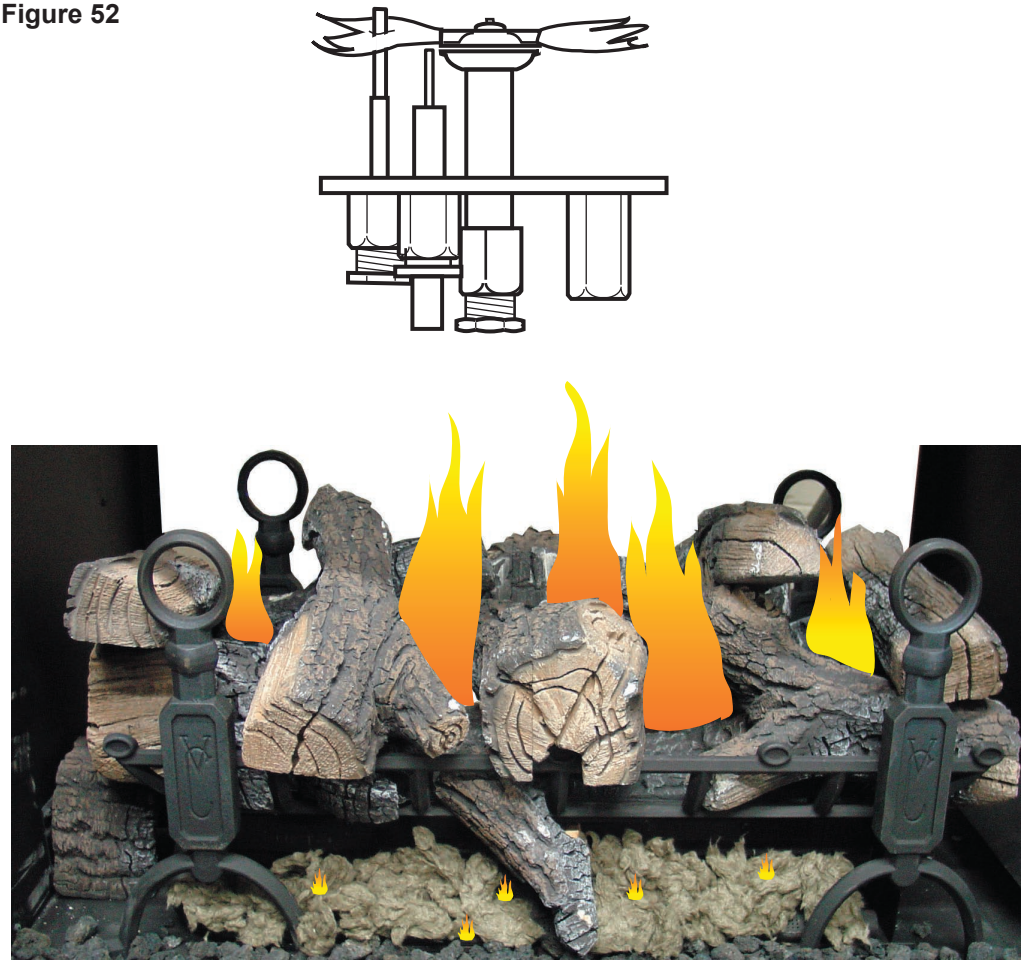

12. Position the log front upper right. (Fig. 51) Hold the log with narrow end toward you. Set the narrow end over the flat notch on the log right grate positioned in Step 10. Lay the wide end of the logs over the branch on the log left grate positioned in Step 8.

## Flame Characteristics

It is important to periodically perform a visual check of the pilot and burner flames. Compare them to Figures 52.

If the flame patterns appear abnormal contact a qualified service provider for service and adjustment.

**Figure 52**



## Trim Installation

**CAUTION: Allow fireplace to cool if it has been in operation.**

Trim components: 2 each, top frame assembly, bottom trim assembly, right and left trim assemblies.

**NOTE:** Only one trim set is used when Vista Door is installed.

**NOTE:** Place trim pieces with magnets facing window frame.

1. Place bottom trim on the bottom of the window frame. **NOTE:** Final adjustments will be made once all trim pieces are in place.
2. The right and left trim piece have a 45° notch on the back corner of the top end. (Fig. 53) Place the right trim against the right side of the window frame, making sure the bottom is overlapping the bottom trim piece. The right side of the trim should butt up against the right side nailing flange of the fireplace.
3. Place the left trim on the left side of the window frame as in Step 2.
4. Place the top trim piece so the ends overlap both the right and left side trim pieces.
5. Adjust the top trim so the top butts up against the top nailing flange and the sides are butted up against the side nailing flanges and the top trim. Once the top trims are in place, move the bottom trim up until it fits securely with the bottom of the side trims.
6. Repeat steps for other side of fireplace.

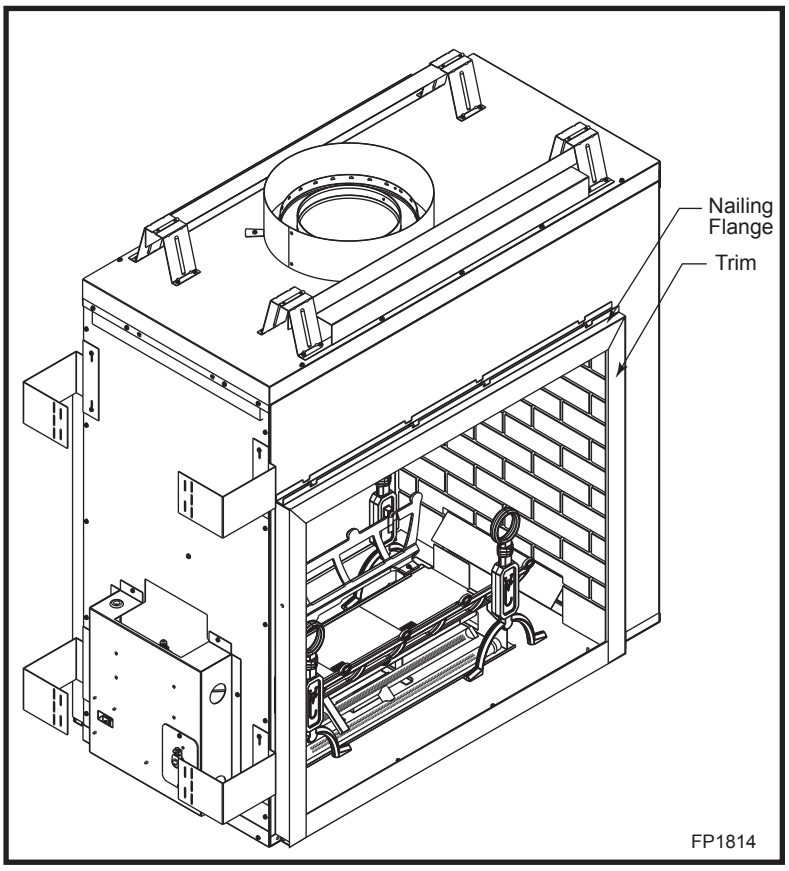



**Fig. 54** Trim frame in place.

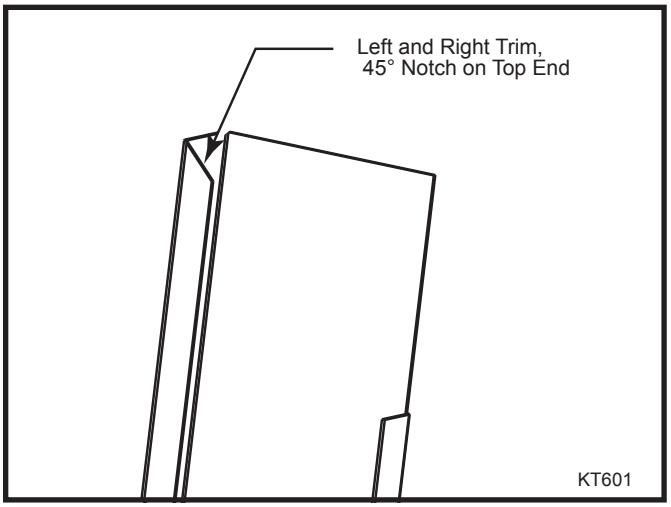



**Fig. 53** The right and left trim pieces have a 45° notch on the back corner of the top end when properly installed.

## Lighting & Operating Instructions

**For Fireplaces equipped with American Flame Automatic Control System (IN or IP)**

**Warning: If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury and loss of life.**

## For Your Safety, Read the Following Warnings before Lighting the Appliance

A. This fireplace is equipped with an ignition device which automatically lights the pilot and main burner. The pilot and burner light automatically with the hand held remote control only. **DO NOT** try to light the pilot by hand. Before lighting this appliance, follow these instructions exactly.

B. **BEFORE OPERATING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than the air and will settle on the floor.

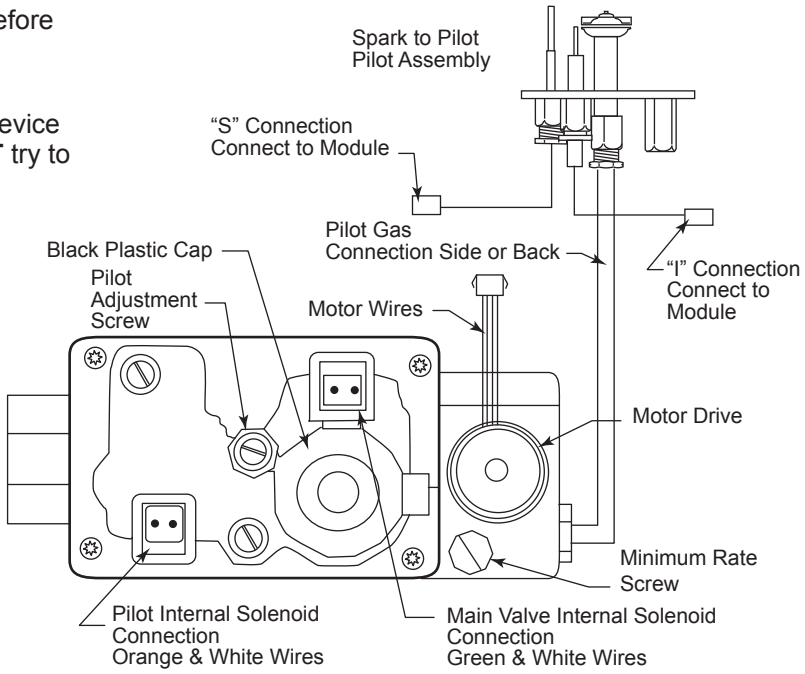
**What to do if you smell gas**

- **Do not try to light any appliance.**
- **Do not operate any electrical switch.**
- **Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas suppliers instructions.**
- **If you cannot contact your gas supplier call the Fire Department**

C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control that has been under water.

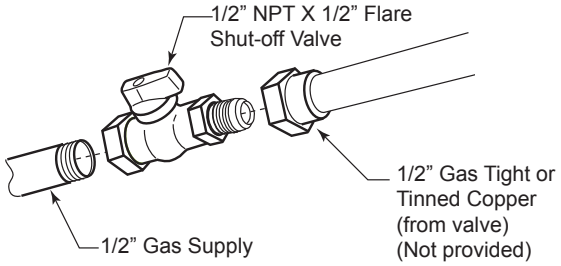
## Lighting Instructions

1. **STOP!** Read the safety information above before continuing.
2. Turn off all electrical power to the appliance.
3. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
4. Turn the wireless remote OFF.
5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP. Follow instruction B in the safety warnings above. If you do not smell gas, go on to the next step.
6. Turn ON all electrical power to the appliance.
7. Turn wireless remote ON.
9. If the appliance will not operate, follow the instructions TURNING OFF THE GAS TO THE APPLIANCE, and call your service technician or gas supplier.




## Turning Off the Gas to the Appliance

1. Turn the wireless remote to the OFF position.
2. Turn OFF all electrical power to the fireplace if service is required.
3. Turn the shut-off valve on the gas supply line to the OFF position.



# Troubleshooting

## American Flame Gas Control System

If erratic system behavior is observed that cannot be resolved by the methods outlined below, ensure that there is not a transmitter with batteries installed that may be interfering. If a transmitter is packed with batteries installed, its buttons may be depressed sending a constant signal which can interfere with the transmission of desired signals. A transmitter with new batteries can have a range of over 100' (30.4 m).

| | |
|---|---|
| Module will not learn transmitter | • Ensure the REMOTE/OFF switch on the side of the module is set to REMOTE.<br>• Make sure the batteries in both the transmitter and receiver are installed in the proper direction and are not drained. Individual battery voltage should be no less than 1.4V for AA and AAA batteries, 2.8V for button cells, and 9,0V for 12V batteries.<br>• Verify the transmitter indicates a signal is being sent. With thermostat transmitters, the LCD display should indicate ON or OFF depending on which button is being pressed. The LED indicator should illuminate on wall transmitters and on/off handheld transmitters. Buttons should be pressed and held for 1 to 2 seconds to ensure a complete signal is sent.<br>• Make sure the transmitter is within the 20' (6 m) operational range of the receiver.<br>• Ensure the 4-pin lead-set is securely connected from the battery pack to the control module's AUX connection. If the A/C power adapter is used, make sure the leads from the adapter are securely connected to the POWER terminals on the control module.<br>• Press and hold the LEARN button on the module for approximately 10 seconds to clear the memory (you should hear a series of beeps from the receiver). Then press and release the learn button (you should hear a single beep from the receiver), immediately press either the ON or OFF button on the transmitter (you should hear a series of beeps indicating the transmitter code has been learned). |
| Pilot will not light/stay lit | • Verify the gas supply is turned on.<br>• Verify the receiver is receiving the signal from the transmitter by listening for a beep from the receiver when ON is pressed on the transmitter. If you do not hear a beep, ensure the module has learned the transmitter (see above).<br>• Ensure the orange lead from the pilot assembly igniter is securely connected to the terminal labeled "I" and the white lead from the flame rectification sensor is securely connected to the terminal labeled "S" on the control module.<br>• Make sure the orange and white leads from the module are securely connected to the terminals labeled "PILOT" on the valve body.<br>• Ensure the black GROUND wire is securely connected to an appropriate metal portion of the valve or pilot assembly. **A proper ground is essential to spark igniter operation.**<br>• Make certain the pilot flame is in contact with the flame rectification sensor on the pilot assembly. This valve is equipped with a pilot flame adjustment screw. If the pilot flame is too small it will not contact the flame rectification sensor and will not complete the safety circuit. |
| Pilot flame is always on/ will not extinguish | • Ensure the CONTINUOUS PILOT switch on the control module is set to OFF.<br>• Check the handheld transmitter display for the word "PILOT" on the LCD screen. If this is displayed, press and hold the CONTINUOUS PILOT button on the handheld transmitter for approximately 10 seconds to turn off continuous pilot mode. |

## Troubleshooting American Flame Gas Control System (continued)

| | |
|---|---|
| Main flame will not light | • Verify the gas supply is turned on.<br>• Ensure the pilot flame will ignite. If not, see pilot flame troubleshooting above.<br>• Make sure the green and white leads from the module are securely connected to the terminals labeled “MAIN: on the valve body.<br>• Make certain the pilot flame is in contact with the flame rectification sensor on the pilot assembly. This valve is equipped with a pilot flame adjustment screw. If the pilot flame is too small it will not contact the flame rectification sensor and will not complete the safety circuit.<br>• Ensure the pilot flame is properly located to ignite the main flame. |
| Flame height adjustment will not work/works backwards | • Ensure the black and red leads from the battery pack or the AF4000 110H/L module are securely connected to the red and black leads from the motor drive or H/L latching solenoid located on the valve body (red to red and black to black).<br>• Make sure the Pulse/Continuous button on the Power Module is set to Continuous mode. If flame does not continuously change (increase or decrease in size) while holding down the ON H/L button, the power module mode must be changed. Hold down the Pulse/Continuous button on the Power Module for 10 to 15 seconds to change mode from pulse to continuous. Re-try flame adjustment.<br>• Check functionality with all transmitters to determine if there is an issue with the main control system or an individual transmitter. If the issue is with an individual transmitter, make sure the batteries in both the transmitter and receiver are installed in the proper direction and are not drained. Individual battery voltage should be no less than 1.4V for AA and AAA batteries, 2.8V for button cells, and 9.0V for 12V batteries. |
| Room temperature displayed on handheld transmitter is not correct. (When using thermostatic transmitters only) | • Ensure the transmitter was not recently stored in a different environment (air-conditioned, heated) from that in which the transmitter is being tested. It may take up to 3 hours for the temperature inside a packaged transmitter, and several minutes for an unpackaged transmitter, to equalize with the room temperature. |
| Unit will not respond in THERMO mode. (When using thermostatic transmitters only) | • Ensure the thermostatic transmitter is within the 20’ operational range.<br>• Make sure an ON or OFF command was not last sent from another transmitter. These commands will override the thermal commands from the handheld transmitter. To return the system to THERMO mode, press either ON or OFF on the thermostatic transmitter, then press the MODE button to put the system in THERMO mode. Press and hold the SET button to change the set temperature.<br>• Verify the set temperature on the thermostatic remote is at least 2 degrees above or below the room temperature. The system will not react to temperatures within 2 degrees of the set temperature. |

## American Flame Gas Control System Error Codes

**Ignition Safety:** Protection for Ignition System

**Error Code:** One beep every one second

**Description of Fault:** Warn users if the pilot is not successfully ignited in 60 seconds.

**How to Clear:** Press OFF then ON buttons to re-attempt ignition.

**What to Check:**

- Ensure gas supply is turned on.
- Ensure orange/white leads from module are plugged into the “PILOT” connection on the valve body.
- Verify the lead from igniter on pilot assembly is connected to the “I” terminal on the module.
- Verify lead from flame sensor on pilot assembly is connected to the “S” terminal on the module.
- Verify that the black ground lead form the module is connected to a proper ground on the fireplace.
- Ensure there is no blockage in the pilot line.

---

**Sensor Safety:** Protection for Flame Sensor

**Error Code:** 4 beeps every one second

**Description of Fault:** Warn users the pilot flame sensor detects a pilot flame already present when ignition sequence is initiated. This fault will also occur if pilot flame sensor is shorted to ground.

**How to Clear:** Press OFF then ON buttons to re-attempt normal ignition.

**What to Check:**

- Check if pilot flame is actually present when valve is turned OFF (valve replacement necessary if yes).
- Replace pilot assembly.
- Replace module.

---

**Thermal Safety:** Overheat Protection

**Error Code:** 4 beeps every two seconds.

**Description of Fault:** Warn users that the module’s internal temperature has exceeded 170° F (77° C).

**How to Clear:** Module’s internal temperature must cool to below 160° F (71° C) and then press ON button.

**What to Check:**

- Is module located in unapproved location, too close to burner?
- Move to cooler location.

---

**Communication Safety:** (**NOTE:** This feature is only available when transmitter includes an LCD screen).

**Error Code:** One beep every four seconds.

**Description of Fault:** Warn users that the transmitter and receiver are not communicating properly.

**What to Check:**

- Verify batteries in both transmitter and receiver are new.
- Ensure transmitter is located within 20 feet (6 m) of receiver.
- Ensure transmitter is not placed in metal enclosure or laying directly on top of a metal surface as this can interfere with transmission.

## Fuel Conversion Instructions

**WARNING! This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.**

**CAUTION: The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion.**

**Avertissement: Cette trousse de conversion Ne doit être installée que par le représentant d'un organisme qualifié et conformément aux instructions du fabricant et aux codes et exigences pertinentes de l'autorité compétente. Quiconque ne respecte pas à la lettre les instrucitons du présent guide risque de déclencher un incendie, une explosion ou le dégagement de monoxyde de carbone entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines. L'organisme qualifié qui effectur les travaux est responsible de l'installation de cette trousse. L'installation n'est pas terminée tant que le fonctionnement de l'appareil converti n'a pas été vérifié selon la notice du fabricant qui accompagne la trousse.**

**ATTENTION: Avant d'effectuer la conversin, coupez d'abord l'limentation en gaz, ensuite, coupez l'alimentation électrique.**

## Conversion Precautions

**Allow unit to cool if it has been operating.**

Before proceeding with conversion, turn control knob on valve to OFF and turn gas supply OFF. Turn OFF any electricity that may be going to appliance.

## Conversion Procedure

1. Remove glass frame. Refer to Page 28.
2. Remove lava rock, volcanic rock, embers and logs. Carefully remove brick panels.

**CAUTION: Logs may be hot.**

**Replace Burner Orifice**

1. With a Phillips or Robertson screwdriver, remove the four (4) nuts holding the fettle to the burner assemblies. With a hex, remove the two (2) hex nuts holding each burner tube to the front of the burner assembly on both sides. Remove burner tubes.
2. Remove two (2) hex nuts holding the left burner leg. Remove burner leg. (Fig. 55)
3. Remove two (2) screws holding the pilot assembly

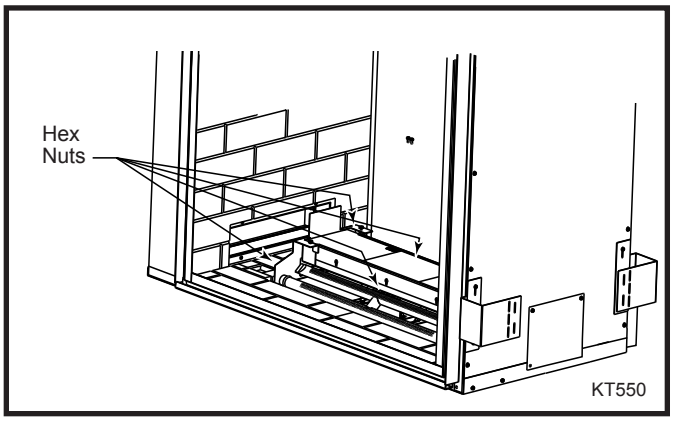



**Fig. 55** Use 3/8" socket to remove hex nuts holding burner legs.

to the burner assembly. Move the pilot assembly toward the back.

4. Slide the burner housing assembly to the left and away.
5. Replace the four (4) injectors. Refer to Table 1.

**Replace Pilot Orifice**

1. Remove pilot hood by lifting up. (Fig. 56) **NOTE:** It is not necessary to remove the pilot tube for conversion.
2. Remove pilot orifice with 5/32" Allen wrench. (Fig. 57)
3. Install the conversion orifice.
4. Reinstall pilot hood. Be sure to align hood with index tab.

**Valve Conversion**

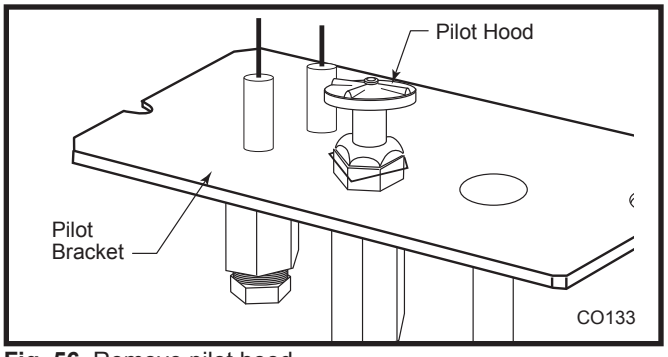



**Fig. 56** Remove pilot hood.

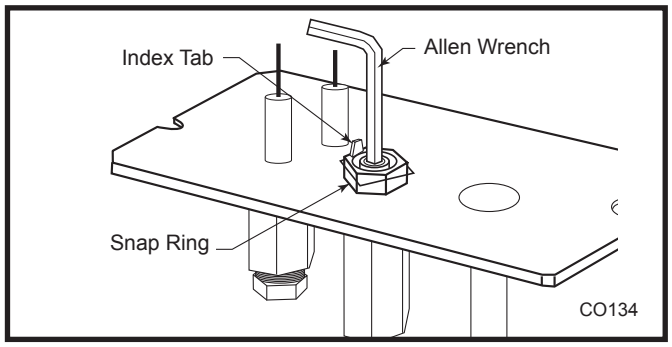



**Fig. 57** Remove pilot orifice.

1. Remove two (2) screws holding the pilot assembly to the burner assembly. Move the pilot assembly toward the back wall.
2. Using a back-up wrench, disconnect the gas supply fitting near the right rear corner of the firebox.
3. Remove four (4) screws holding the burner assembly to the firebox floor.
4. Carefully slide the burner assembly out of the way.
5. Remove 13 screws around the perimeter holding large access panel on the of the firebox.
6. Carefully pull back the panel just enough to gain access to control box.
7. Locate the black plastic cap on the gas valve. (Fig. 58) Remove the black cap by pulling the cap straight off. Note the position of the marker on the top of the rotary knob. This marker will point to NAT or LP. (Fig. 59)

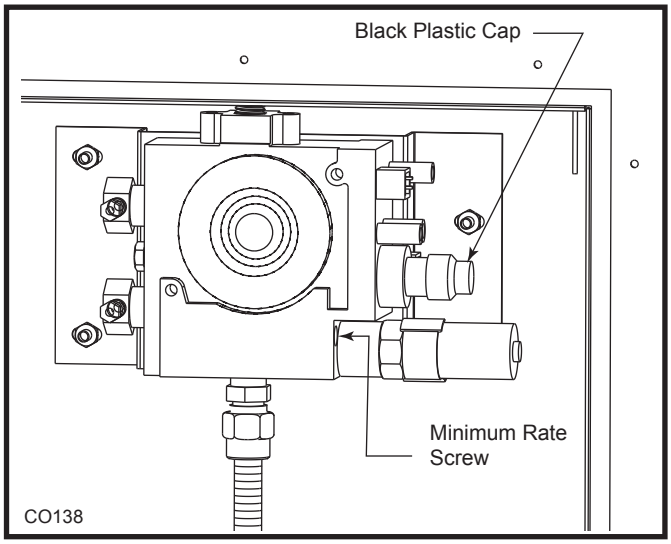



**Fig. 58** AF4000 Valve in place.

8. To convert the valve from NG to LP, push in the knob and rotate 90° (1/4 turn). **NOTE:** The shaft should point to LP. The shaft will remain pushed-in.
9. Remove the slotted brass minimum rate screw located in the valve next to the motor drive. (Fig. 59)

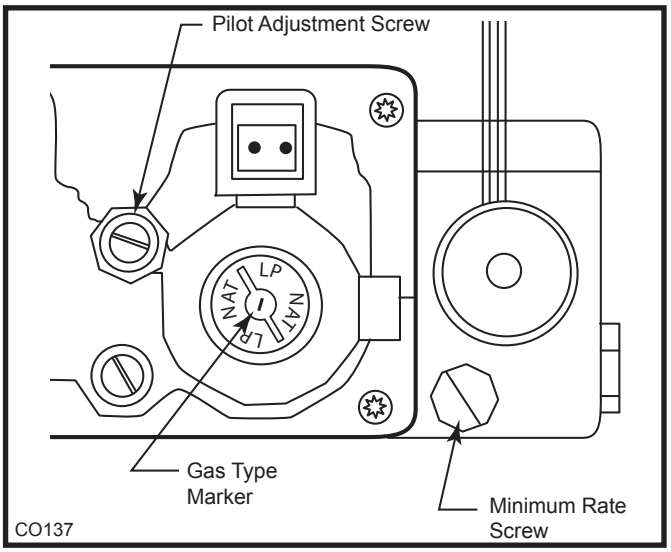



**Fig. 59** Remove black plastic cap and adjust rotary knob to correct gas type. (LP position shown) Replace minimum rate screw with one supplied in conversion kit.

10. Replace the minimum rate screw with the one provided in the LP conversion kit supplied with this fireplace. Ensure the screw is fully installed.
11. Install the enclosed identification label to the valve body where it can be easily seen.
12. Reinstall steel panel.
13. Reinstall burner to original position. Reinstall burner leg, burner tube and fettle. Re-attach supply tube to gas supply fitting. Using a back-up wrench, tighten securely.
14. Test for leaks. Apply electric and gas to the system.
15. Light the pilot burner using the remote control. With soapy solution check for leaks around the pilot assembly where the tube enters the pilot assembly. Tighten fitting if necessary.
16. Light the main burner and check for leaks around the burner supply tube fittings and burner orifices. Tighten if necessary.
17. Turn fireplace OFF.
18. After the conversion and leak checks have been made, manifold outlet pressure can be checked with a manometer at the test ports located at the side front edge of the fireplace opening. The lower test port is manifold outlet pressure.

**CAUTION:** Turn off the gas supply before removing test port plug.

19. Using a 7/16” nut driver, remove the threaded plug from the test port.
20. Thread the supplied extension adaptor into the open test port.
21. Attach a 1/4” diameter pressure gauge flexible hose fully onto the barb of the adaptor.

22. Turn on gas supply and operate valve with remote control as needed to indicate gas pressure. The manifold pressure for LP should be approximately 10.0” wcp.

**CAUTION:** Turn off the valve and gas supply before removing test port adaptor and replacing plug.

23. After test, remove adaptor and replace plug.
24. Turn on gas supply and check that plugs are tight and leak free.
25. Follow instructions in Homeowner’s Manual to re-assemble brick panels, logs, lava rock, volcanic rock, embers and andirons.
26. Replace glass frame.
27. Conversion complete.

## Pilot Flame Adjustment

Typically, the top 3/8” or 1/2” of the pilot flame sensor should be engulfed in the pilot flame. (Page 33, Fig. 52)

To adjust pilot burner:

1. Locate pilot adjustment screw on the valve next to the black plastic cap. Refer to Page 35.
2. Adjust pilot screw to provide proper sized flame. Only a small adjustment should be needed.

**NOTE:** Do not rotate screw excessively. Do not adjust any other screws on the valve.

**Table 1 DVT38S2 Injector Orifice Size Matrix**

| Conversion to LP | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KiT # 20012368 Model | Burner Housing | Part # | Burner Housing/ Pilot* | Part # | Burner Tube | Part # | Burner Tube | Part # | Input (BTU/hr) Min. | Input (BTU/hr) Max. |
| DVT38S2IP | #55 (.052”) | 30000333 | #54 (.055”) | 20000130 | #57 (.043”) | 20004587 | #57 (.043”) | 20004587 | 38,000 | 56,000 |

**Table 2 Valve Minimum Rate Screw**

| Model | Drill Size | Part # |
|---|---|---|
| DVT38S2IP | No Shank Screw | 20012264 |

# Maintenance

**Burner and Burner Compartment**

It is important to keep the burner and the burner compartment clean. At least once per year the logs and lava rock/ember material should be removed and the burner compartment vacuumed and wiped out. Remove and refit the logs as per the instructions in this manual.

**Always handle the logs with care as they are fragile and may also be hot if the fireplace has been in use.**

## Cleaning the Control System

The burner and control system consist of:

- burner tubes
- gas orifice
- pilot assembly
- gas valve

Most of these components may require only an occasional checkup and cleaning and some may require adjustment. **If repair is necessary, it should be performed by a qualified technician.**

1. Turn off main gas shut-off valve.
2. Allow fireplace to cool if it has been operating.
3. Remove window frame assembly. (Refer to Window Frame Assembly Removal section.)
4. Remove logs.
5. Vacuum burner compartment especially around orifice primary air openings.
6. Visually inspect pilot. Brush or blow away any dust or lint accumulation.
7. Reinstall logs.
8. Ignite pilot - Refer to Lighting Instructions.
9. Reinstall window frame assembly.

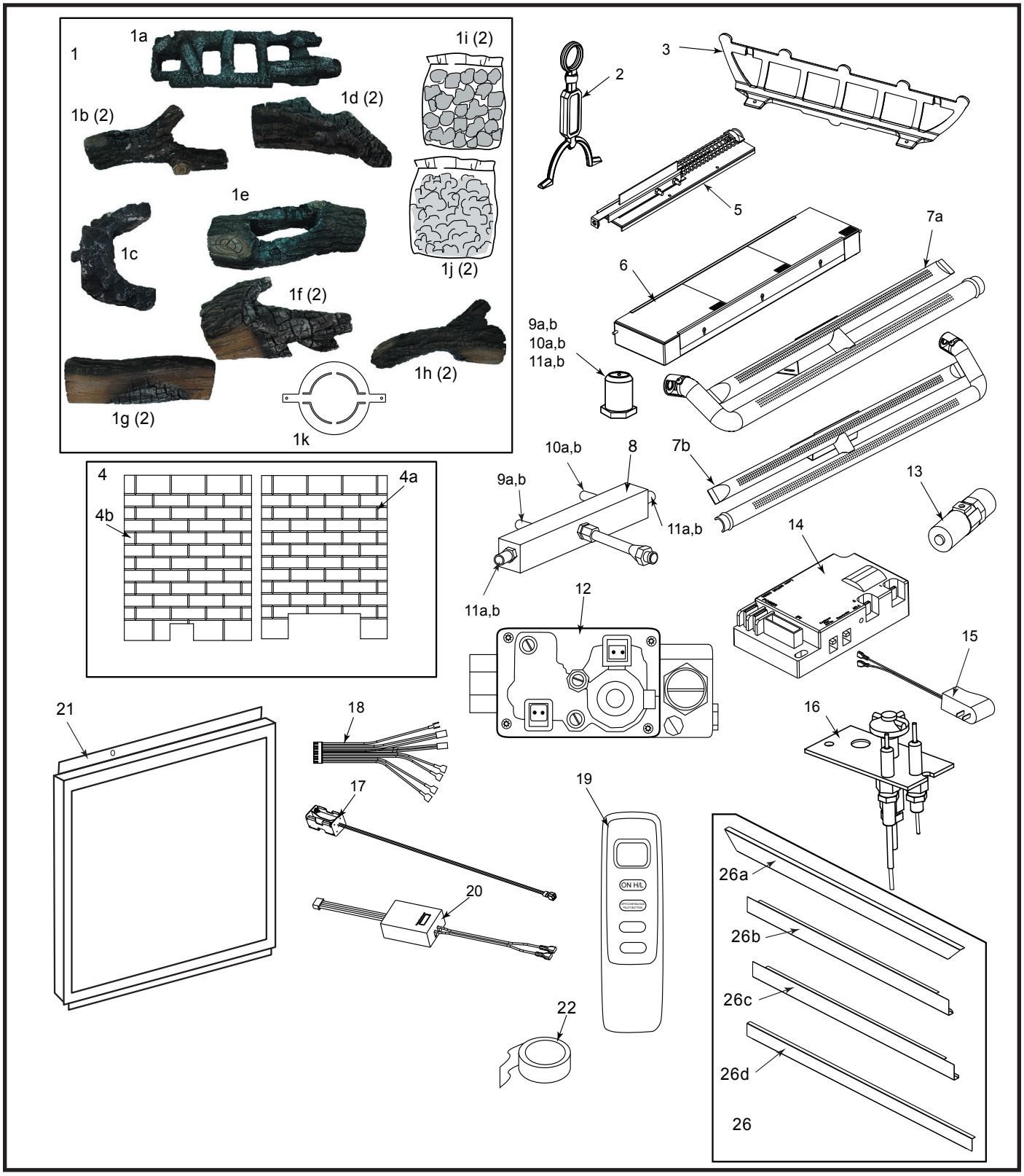
To obtain proper operation, it is imperative that the pilot and burner's flame characteristics are steady, not lifting or floating.

Typically, the top 3/8" or 1/2" of the pilot flame sensor should be engulfed in the pilot flame. (Page 38, Fig. 52)

To adjust pilot burner:

1. Locate pilot adjustment screw on the valve next to the black plastic cap. (Refer to Page 35)
2. Adjust pilot screw to provide proper sized flame. Only a small adjustment should be needed.

**NOTE:** Do not rotate screw excessively. Do not adjust any other screws on the valve.




CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

# DVT38S2 Units: GFYW5Q0

## DVT38S2 (continued)

| Ref. | Description | DVT38S2 |
|---|---|---|
| 1. | Log Set (Complete) | 20011955 |
| 1a. | Log Overlay F56 | 20012883 |
| 1b. | Log Right Grate F49 (2 per fireplace) | 20011980 |
| 1c. | Log Pilot Plumbing F50 | 20011981 |
| 1d. | Log Grate/Burner Tube F51 (2 per fireplace) | 20011982 |
| 1e. | Log Middle F52 | 20011983 |
| 1f. | Log Left Grate F53 (2 per fireplace) | 20011984 |
| 1g. | Log Front Upper Right F47 (2 per fireplace) | 20012695 |
| 1h. | Log Front Right F48 (2 per fireplace) | 20012696 |
| 1i. | Volcanic Rock (2 per fireplace) | 20000376 |
| 1j. | Bag of Glowing Embers (2 per fireplace) | 0005219 |
| 1k. | Restrictor | 20005817 |
| 2. | Andiron Assembly (4 per fireplace) | 20011952 |
| 3. | Fettle (2 per fireplace) | 20011951 |
| 4. | Refractory Set Complete (CR Kit DVT38S2) | 20011882 |
| 4a. | Refractory, Right Side | 20011810 |
| 4b. | Refractory,  Left Side | 20011811 |
| 4c. | Hardware Kit (not shown) | 20007576 |
| 5. | Spring Latch Assembly | 20005788 |
| 6. | Burner Housing Assembly | 20009392 |
| 7a. | Burner | 20009311 |
| 7b. | Burner Tube Assembly - Pilot Side | 20009308 |
| 8. | Manifold Tube Assembly | 20009282 |
| 9a. | Burner Housing Orifice - #55 - LP | 30000333 |
| 9b. | Burner Housing Orifice - #38 - Natural | 20009310 |
| 10a. | Burner Housing/Pilot Orifice - #54 - LP | 20000130 |
| 10b. | Burner Housing/Pilot Orifice - #38 - Natural | 20009310 |
| 11a. | Burner Tube Orifice - #57 - LP (2 per fireplace) | 20004587 |
| 11b. | Burner Tube Orifice - #45 - Natural (2 per fireplace) | 20010169 |
| 12. | American Flame Valve AF-4034-In Assembly | 20011893 |
| 13. | DC Motor, Valve | 20011898 |
| 14. | Main Module | 20011895 |
| 15. | AC Adaptor | 20011900 |
| 16. | Pilot Assy. 3way N/DV Top Convertible - IN | 10002387 |
| 17. | Battery Back-up Accessory Kit Optional (not shown) | DVTBBK |
| 18. | 24” Wire Harness | 20012258 |
| 19. | Remote Control | 20011904 |
| 20. | Power Module | 20011901 |
| 21. | Glass Frame Assembly (2 per fireplace) | 20012242 |
| 22. | Outer Pipe Aluminum Foil Tape | 20006169 |
| 23. | Milpack Tube (not shown) | 53326 |
| 24. | Screw #1/4-20 x 1.5 Black Pan Quad (Glass Frame Screw) | 20006471 |
| 25. | Cement Rutland (not shown) | 30000524T |

## DVT38S2 (continued)

| Ref. | Description | DVT38S2 |
|---|---|---|
| 26. | Trim Kit Complete (2 per fireplace) | 20010894 |
| 26a. | Top Trim (2 per fireplace) | 20010901 |
| 26b. | Right Side Trim (2 per fireplace) | 20010902 |
| 26c. | Left Side Trim (2 per fireplace) | 20010903 |
| 26d. | Bottom Trim (2 per fireplace) | 20010904 |

**Fuel Conversion Kits**
Conversion Kit, NG to LP # 20012368
Conversion Kit, LP to NG #20013196

# Accessories

## Back-up Battery Kit

All Models: DVTBBK

Follow instructions provided with the kit and on Page 9 for installation.

## Wall Mountable Wireless Remote Transmitter

All Models: Part # 20012267.

Refer to Page 9 for installation.

# LIMITED LIFETIME WARRANTY

## PRODUCT COVERED BY THIS WARRANTY

**All Vermont Castings brand gas stoves, gas inserts, and gas fireplaces installed in the United States of America or Canada.**

### LIMITED LIFETIME WARRANTY

CFM Corporation (hereinafter referred to as CFM) warrants that all cast iron parts, the combustion chamber, ceramic burner, and heat exchanger of every Vermont Castings gas product will be free of defective material or workmanship during the period the product is owned by the original owner subject to proof of purchase and the conditions and limitations listed on this warranty document.

### BASIC ONE-YEAR WARRANTY

CFM warrants to the original owner that your new Vermont Castings Gas Appliance is free from defects in material or workmanship for a period of one year from the date of purchase, subject to the following conditions and limitations. Labor to replace these parts is covered for one year, reimbursed per our warranty service fee schedule.

### COMPONENT WARRANTY LIMITATATIONS

**PORCELAIN ENAMEL FINISHED PARTS:** CFM offers no warranty on chipping of enamel surfaces. Inspect all products prior to accepting them for any damage to the enamel. The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off. Color lot variations with parts and/or accessories can occur and are not covered by warranty.

**GLASS:** Glass is not warranted for breakage due to misuse or accident. Glass is not covered for discoloration or stains due to environmental issues, or improper cleaning and maintenance.

**PLATED PARTS AND ACCESSORIES:** Brass, nickel, and gold parts should be cleaned with Lemon oil only. Commercial cleaners cannot be used. Mortar mix and masonry cleaners corrode the brass finish. The CFM will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

**ACCESSORIES:** Unless otherwise noted, CFM supplied accessories are covered for a period of one year.

### GENERAL CONDITIONS AND LIMITATIONS

- This Vermont Castings product must be installed or serviced by a qualified installer, preferably NFI or WETT (Canada) certified, as prescribed by the local jurisdiction. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of Vermont Castings branded CFM products.
- Parts covered under the Limited Lifetime Warranty will be covered for the lifetime of the appliance up to a maximum of seven (7) years after CFM discontinues the model. The maximum amount recoverable under this warranty is limited to the purchase price of the product and, if CFM is unable to provide replacement or repair in an expedient and cost effective manner, CFM may discharge all obligations under this warranty by refunding the purchase price of the product.
- Any labor and related repair charges relating to the cost and expenses of replacing or repairing defective components under the Limited Lifetime Warranty are not covered, except as provided for under the Basic One-Year Warranty.
- Any part or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise of same, will not be covered by this warranty, nor shall the Company assume responsibility for same. **IN NO EVENT SHALL CFM BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT except as provided by law**
- SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- All other warranties expressed or implied with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product.
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:

a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.

b) Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

- This warranty is void if:

a) The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.

b) The fireplace has been subjected to prolonged periods of dampness or condensation

c) Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.

d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

### IF WARRANTY SERVICE IS NEEDED...

Contact your installing Vermont Castings dealer. Make sure you have your warranty, your sales receipt, the model number and serial number of your CFM product. If you're the installing dealer is unknown or unable to provide necessary parts or service, a list of Authorized Vermont Casting dealers can be located on the internet at www.vermontcastings.com

Canada

ENERGUIDE

**Look for the EnerGuide Gas Fireplace Energy Efficiency Rating in this brochure**

***Based on CSA P.4.1-02***

| Efficiency Ratings | |
|---|---|
| **Model** | **EnerGuide Ratings Fireplace Efficiency (%)** |
| DVT38S2IN | 47.1 |
| DVT38S2IP | 47.1 |

NATIONAL FIREPLACE INSTITUTE® NFI CERTIFIED www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

**CFM Corporation**

2695 Meadowvale Blvd. • Mississauga, Ontario, Canada L5N 8A3
800-668-5323 • www.cfmcorp.com